In traditional archaeology, traces of play and gaming have commonly been dismissed as less significant. Such remains are recurrently seen as traces of idle pastime, which is to say, they are viewed upon as something 'non-serious'. Traces of play can sometimes also be explained in terms of social rituals, such as associated with social status. The remains can in this way be said to be made serious; be provided a role within that ancient societal structure that is in focus. What happens in this case, however, is that the 'fun' dimension is lost.

This study examines game-related finds with the aim of reaching and discussing the social influence of the dimension of play in an ancient settlement. The finds originate from the Bronze Age Indus Valley settlement of Mohenjo-daro in Sindh, southern Pakistan. They are studied through a critical reading of older, published and unpublished, excavational documents. Based on selected results of this analysis, the study makes use of both established and new terminology in order to illuminate different aspects or spectra of play. In this reasoning, the division between form and content maintained by Simmel, as well as the emphasis by Bateson on autonomously working systems, emerge as central concepts.

The study takes on a twofold structure in that the aim of reaching play at the same time offers a test of the scientific linguistic usage. The character of testing builds on a modified form of grounded theory, in which a model of work is created in the shape of a grid. It is argued that this way of work has the potential to yield alternative, more socially embedded insights into the settlement.

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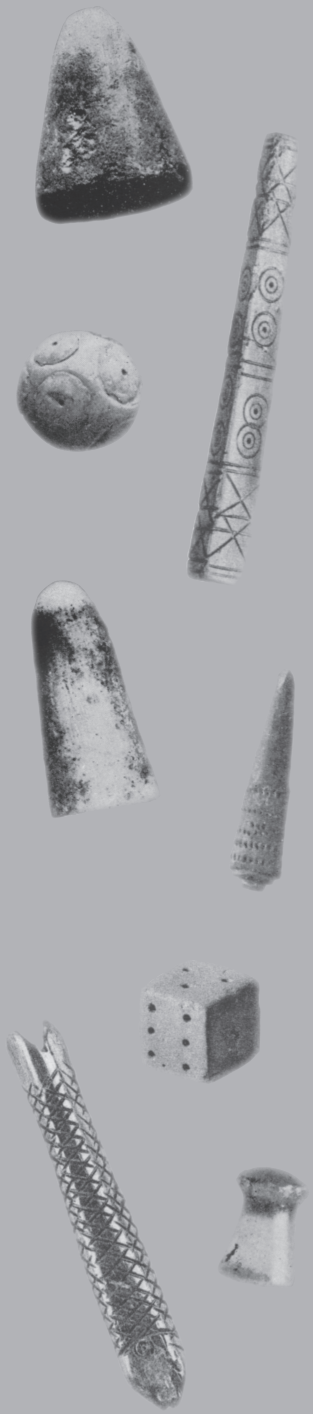
Gaming in Mohenjo-daro – an Archaeology of Unities

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Abstract

Rogersdotter, Elke. *Gaming in Mohenjo-daro – an Archaeology of Unities.*
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The main question of this thesis concerns the possibility of illuminating the presence and impact of the irrational element that is play in an ancient societal structure. With this question as a lodestar, the investigation has come to concern the development of an alternative way of work that can manage to embrace the positively loaded, 'fun' dimension of play. The view of fragmented archaeological remains as autonomously working unities has been of central importance for this mode of procedure.

The study is based on selected game-related finds from the site of Mohenjo-daro. Located in Sindh in southern Pakistan, the site constitutes the remains of the largest urban settlement of the Bronze Age Indus Valley realm (ca. 2500-2000 BC). One of the typical features of this realm constitutes a focus on small-sized art. Among other artefacts, numerous small objects of a supposedly game-related purpose have been found in Mohenjo-daro, such as dice and gamesmen.

The study tests its way along different paths. The mode of procedure builds on a modified form of grounded theory. In this form, emphasis has been put on the concept of abduction in the version of Bateson. Stress has also been laid on Simmel's description of the process of understanding. With this reasoning, the researcher's self is accentuated as an integrated component in the process. The consequence of the modifications is a model in the shape of a grid – a working grid – where the different rows, internally divided up into compartments representing stages of work, constitute different, autonomously working ways. The empirical investigation is based on a critical reading of older excavational documents. Rather than aiming at a systematic division between what is game-related and what is not game-related, the reading is undertaken with the aim of seeing whether this kind of material can be studied despite the problematic appearance of the sources. Through a practical application of the working grid, the bearing capacity of the materials is tested from different angles. In the following theoretical discussion, the grid is utilized in a more theoretical manner in order to reach different aspects of play. The most successful approach builds on the discernment of autonomously working unities in the studied materials. This is based on Simmel's division between form and content, as well as on the emphasis by Bateson on autonomously working systems.

The study argues that this way of work has the potential to yield alternative, more socially embedded insights into the settlement. It attains a twofold structure in that the aim of illuminating play both offers a test of the scientific linguistic usage, as well as forms into a methodological instrument with which to reach the individual of the past.

Key words: Mohenjo-daro, Indus Valley, Bronze Age, Pakistan, play, gaming, play spectra, grounded theory, form and content, Simmel, abduction, logical types, autonomously working systems, Bateson, systems of representation, symbolic capital, deconstruction, nanoarchaeology, reflexive archaeology

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It is our contention that the full theoretical significance of the 'self' concept does not unfold until the possibility of playing is considered.
-Csikszentmihalyi & Bennett, *An Exploratory Model of Play* (1971:56)

In jeder Sphäre, durch jedes uns gegenwärtig Werdende blicken wir an den Saum des ewigen Du hin, aus jedem vernehmen wir ein Wehen von ihm, in jedem Du reden wir das ewige an, in jeder Sphäre nach ihrer Weise.
-Buber, *Ich und Du* (1962/1923:81)

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The work is dedicated to Zameer Machi, Dhandh, Mohenjo-daro.

Kalmar, December 2010
Elke Rogersdotter

Contents

List of figures

Preface

The main title of this work refers to the presence and impact of play and gaming in an ancient settlement. The sub-title alludes to the search for a method that can lead us towards this impact. In focal point for this study are game-related finds from the Bronze Age Indus Valley settlement of Mohenjo-daro. These finds constitute a basis for an analysis of *play as a social phenomenon*, which is the main theme of this thesis. At the same time, this gives an opportunity to test to which extent old, already excavated materials can be used for archaeological purposes. What, then, 'is' play, and how is this to be distinguished in the archaeological materials? It is not easy to find quick answers to these questions. In fact, the present work can be seen as an attempt to respond to questions like these. The main idea is to search for play as a fundamental, human dimension, not as something that is reserved for the world of children. Toy-related artefacts have therefore been excluded from the investigation. Instead, the choice has fallen upon game-related objects, since, in societal structures older than our own, modern time, the playing of games is usually associated with adults.[1] Can, then, *game*-related finds constitute traces of *play*? In this work, the answer is yes, and terms such as play and gaming are in line with this utilized as synonyms (or used combined). This follows in line with the view of play that is described in Chapter one as the alternative perspective. According to this view, play can occur in all possible contexts as a markedly fundamental and interwoven element: within the explicit play, within gaming, as well as within totally different areas of human life such as within what one would usually call work. At the same time, this interwoven quality naturally has the effect that play becomes difficult to distinguish from an archaeological point of view. Game-related artefacts have therefore also been chosen since these can be said to constitute archaeologically tangible traces of play. As will be clear from the text, a universal viewpoint of play is furthermore adopted. That is to say, it is acknowledged that different kinds of play and gaming have the capability – despite appearing in widely different parts of the world –

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[1] It is known that until the eighteenth century, the playing of board games mainly belonged to the world of adults (Finkel 2007b:1).

to resemble each other to a remarkable degree.[2]

In traditional archaeology, traces of play have commonly been dismissed as less significant. Such remains are recurrently seen as traces of idle pastime, which is to say, they are viewed upon as something non-serious. On these grounds, they are usually not given further, research-related thoughts. Traces of play can sometimes also be explained in terms of social rituals, such as associated with social status, or be seen out of ritual or magic aspects. The remains can in this way be said to be made serious; be provided a role within that ancient societal structure that is in focus. What happens in this case, however, is that the 'fun' dimension is lost. The question, therefore, that I would like to bring to the forefront is: how can play as play be explained as something serious? Or, differently formulated, how can play as play be illuminated from a scientific perspective? The question can be said to form a paradox – by definition an impossibility – as play constitutes something totally different than science and therefore cannot be science, or cannot be included in science. At the same time, however, play as play forms a fundamental part of human life, from which it follows that it should be possible to reach. The question can thus be taken to challenge the scientific thinking, as well as the methodological way of working. Is it possible to follow established methodological and theoretical reasoning? Or must new paths be found? This is examined by following different ways of testing, which builds on a modified form of grounded theory. In an earlier work, I have made use of grounded theory in a more schematized way in order to illuminate the usability of the theory in archaeology, in particular for controversial inquires such as these (Rogersdotter 2008). In the modified form, the concept of abduction in the version by Bateson (2002/1979) becomes of central interest. The four stages of work that according to grounded theory constitute the components of the different levels of work are furthermore based in what I have chosen to call archaeological starting points. These build mainly on lines of thought by Simmel (1999/1918). In short, the modifications concern the possibility of seeing entireties in the fragmented materials by connecting these to the specific question and angle of approach of the researcher. The modifications have the effect that the different

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[2] Thoughts concerning explicitly ritual or magic aspects of games have not been included in this work, for reasons that will be evident in the following.

ways of testing partly build upon each other in the way advocated by grounded theory, partly function as autonomously working unities. Laid beside each other in parallel rows, at the same time as being internally divided up by the four stages of work, the different ways form into a *grid*, upon which both the empirical investigation and the theoretical discussion rest. In the empirical investigation, the grid is used in a more practical manner; to test the bearing capacity of the materials. In the theoretical discussion, it is used in a theoretical way, aimed at illuminating the phenomenon of play.[3] Here, play constitutes a mirror, illustrated by the use of different play spectra (Fritz 2004), against which different modes of thought are tested. Of central concern in the thesis is the drawing up of a different way of thinking, a more theoretically driven archaeology, with the aim of investigating whether small artefacts and the things that are close at hand can be admitted to have a social significance. With this, and at the same time as the phenomenon of play forms the subject or the goal of the investigation, the concept becomes a *methodological instrument*; a way of reaching the individual of the past. The work points at what could be defined as a *nanoarchaeological* direction. In this, the search for abstract patterns is of great significance, as well as the endeavour to distinguish autonomously working unities in the materials. The study attains a twofold structure, which among other things is expressed in the fact that the striving for autonomously working unities concerns both the methodology as well as the studied materials. With this way of working, play also forms a *metastructure* in the text: the grid can be compared with a game board, with different tracks to follow and equipped with materials to 'play with', with the aim of building patterns. This I see as an inevitable necessity for a scientific work that has play as its purpose. If I only discussed the game-related finds as game-related finds and nothing more, I would be guilty of exactly that negligence of play – that continuous dividing up of the world – which I intend to avoid.

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[3] Summaries of the undertakings and discussions concerning play, as well as concerning the method of use can be found in Chapter 7.

1
Faceless People Playing?

We play and know that we play, so we must be more than merely rational beings, for play is irrational.
-Huizinga, *Homo Ludens* (1955/1938:4)

1.1. A prime element

Some people in front of us, engaged in a game. Some sit, others stay around watching. The clicking sound from the gaming pieces, clearly heard in the still evening. Also, the low, singing tone from those watching, following and nurturing the rhythm of the game…

This could perhaps have constituted a scene from Mohenjo-daro, formed on the basis of the game-related finds of the ancient settlement. Mohenjo-daro in the province of Sindh in today's Pakistan is the name for the largest urban settlement of the Bronze Age Indus Valley realm (ca. 2500-2000 BC[1]). The site had an inhabited area greater than 250 hectares, and the population is estimated to have counted more than 35 000 inhabitants (Jansen 1993:125; Kenoyer 2000:49f). The site consists mainly of hundreds of clustered remains of mudbrick buildings, separated into distinct neighbourhoods and intersected by broad streets and narrow lanes (fig. 1.1.). As the most well-known ruin of the nation of Pakistan, it is allowed to adorn the 10-Rupee-note of the country, and since 1979, it is included in the list of world heritages of UNESCO. Yet, and despite its size and importance as a site, there are a great many angles of this settlement that are still unknown to us. Main aspects such as for example form of administration and leadership, or prevailing ideological thoughts, have not been possible to explain in satisfactory ways. On grounds of its unknown features, the settlement – as well as the Bronze Age Indus Valley in general – has tended to be described in popular

[1] The time bracket follows Shaffer's (1992) terminology and refers to the 'Harappan phase'.

science as both enigmatic and faceless. What, then, would happen, if we in light of this had a closer look at the game-related finds?



Fig. 1.1. Lane flanked by mudbrick walls, Mohenjo-daro (photo by the author).

In an earlier work, I have treated the theme 'children and play materials' seen from an archaeological perspective, and the importance of lifting forward the world of children as an essential part of the societal structure (Rogersdotter 2008; see also Rogersdotter 2006, 2007). In connection with this work, it was shown how disregarded the concept of play seemed to be within archaeology (Rogersdotter 2008:21ff). The study was based on prevailing views within among other directions gender archaeological perspectives. Here the aim has been to lift forward children as adequate members of past societal structures. The opinion is that children have been neglected by traditional archaeology since they, following the Western line of thought, have come to be viewed as "/.../people who play rather than contribute socially or economically to society" (Sofaer Derevenski 2000:7). Against the Western, stereotyped picture of the passive and marginalized child, alternative angles have been approached that focus on the societal participation of children from aspects such as socializing and learning (Sofaer Derevenski 2000:7).[2]

[2] See for example Finlay (1997) and Grimm (2000).

Let us however at this point stop at the mentioned quotation, and especially focus on the words *people who play rather than*. Out of these, we can question if it really, or only, is the child that is being neglected? The quoted sentence seems when closely observed not to be about the child in just any way, but about the playing child and the circumstance that the child, when playing, is *not* able to participate in, and contribute to, the socio-economical, societal life. It should thus be the very context 'the playing child' that has been marginalized. This in turn leads to an important question: if the child is cut out from the epithet playing to become portrayed out of other, economic and socializing perspectives, what then happens with the word playing? When is playing cut out of its context with children? Or do we tend to let it disappear and in that case where and why?

According to Lönnqvist (1992), a two-parted view of play can be found in the scientific thinking. He distinguishes these with the concepts the *mirroring*- and the *adventure mechanism*. The first viewpoint sees play from a pedagogic and commercial perspective, as something that is intended for children but directed by adults. The second angle focuses on children's own capability of creating and changing the world, by which play is rather viewed upon from a perspective of freedom. The first viewpoint has traditionally constituted the most common (Lönnqvist 1992:77ff). Fritz (2004) points in a similar way to the fact that one of the oldest perspectives on play has concerned whether the play constitutes something 'useful' (Fritz 2004:92). Leading examples include Groos from 1899 who published two volumes about the use of play and among other things focused on children's learning of skills through play. Another example is Mead from 1934, who lifted forward the social use of play (Fritz 2004:94f). The work *Toys as Culture* by Sutton-Smith (1986), one of the most influential child- and play researchers, also belongs to this field. In this comprehensive analysis of the relation of toys and play to culture, play becomes a socialising medium through which the child makes acquaintance with new situations (Lönnqvist 1992:74). Within the developmental psychology, a number of approaches have been concerned with the ordering of play into evolutionistic schemes following the cognitive development of the child. The scheme classification by Piaget (1999/1951) has become one of the most trendsetting, and since the 1950s have psychological and pedagogic directions dominated the

research on play (Fritz 2004:262; Hägglund 1989:30ff; Lönnqvist 1992:75).[3] As we can see, it is all about child-related play, put into and directed by an adult pattern of thought. Behind this ambition to 'make play pedagogical' lurks, as claimed by Fritz, "/…/the fear, that something uncontrollable would develop/…/" (Fritz 2004:96, *my translation*). The idea of using the 'useless' play for useful purposes, for the promotion of the education of children, stretches according to him through the entire European tradition of thought back to Aristoteles (Fritz 2004:93). We learn from Lönnqvist that strong roots to this prevailing, Western view can be seen in the philosophical works of the 17th and the 18th centuries, particularly those of Locke and, to some degree, those of Rousseau. Proceeding from his well-known idea of the child as a *tabula rasa* – a blank page upon which life's experiences will soon start writing their text – Locke transformed play into a useful instrument directed by adults for educating the child and leading it into sensible thinking. In contrast, play in the management of children became expelled to the separate realm of children as meaningless, unstructured and irrational (Lönnqvist 1992:355ff). When seen from this point of view, and when not being regarded from an educational perspective, play accordingly tends to stand out as something superfluous, even threatening in its un-controllability. Being irrational, play emerges as an unavoidable opposite of science (Bauer 1995:8). We reach with this at a two-parted view, in which a 'serious-explained', need-fulfilling play, directed towards the development and education of children, can be included in science, while play as play can be said to be left out. A further consequence of this angle seems to be that play cannot actually appear outside the Western sphere. Linked to education and directed by adult thought, it becomes connected to the marginalized and passive, West-related child. This seems accordingly to constitute a clue to the

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[3] The great influence of the developmental psychology and the pedagogy tends recurrently to establish itself in the mode of expression of the popular science concerning play and gaming. In connection with the use of games in companies in order to open new doors to such things as ways of cooperation between the co-workers, it is stated that "/.../if play and gaming solely used to be a pleasure/.../, the tendency of today goes in the totally opposite direction: play and gaming tend more and more often to become a downright training – but with entertainment as a bonus" (Poulsen 1999:57, *my translation*).

question of why there is an ambition to free the child from the epithet playing. It also seems to explain why play, separated from the child and thus from actual significance (read: usefulness) is left out. We may thus search for an answer to the above mentioned question, concerning why we seem to let play disappear, in the view of play that the Western thinking has traditionally entertained.

Another way of answering can be linked to archaeological trends. We know that focus traditionally and recurrently has been laid on heavy instances and big answers, such as form of administration, war and conflicts, religion and so forth. In her article *Honoring Ambiguity/Problematizing Certitude*, Gero (2007) mentions specific 'mechanisms of closure' or 'inclusive strategies' as prevailing within the archaeological discipline. These are viewed upon as a reaction against the various factors of ambiguity and uncertainty that surround archaeological work on all levels. Gero maintains that despite the fact that every step of archaeological research requires more or less difficult – sometimes impossible – interpretations to be made, archaeologists tend recurrently to disregard, by overlooking, erasing and similar tendencies, confusing and ambiguous evidence from their conclusions in order to reach at *certainty*. Examples of such strategies involve what Gero calls 'cleaning the data'; that is, striving to make sets of data more homogenous in order to 'reduce ambiguity'. This can be done by such things as grouping the data into larger entities (like 'deteriorating environment'). By this, the finds "/…/can be inventoried,/…/and read as carrying the same meanings/…/in comparable contexts" (Gero 2007:320). We can hence see big answers or lumps of categories as the result of such strategies. They turn into recognizable platforms, with which it is possible to build a stable and static model where all parts can be fitted in for the sake of solidity. These categories or instances become the lowest common denominator, while the 'still smaller' – small artefacts and the things that are close to hand – are being neglected or given trifling significance. We may perhaps go so far as to suggest that research legitimacy becomes based on the size of the finds. The reason that investigations of playing have traditionally not constituted a priority area could hence, in this line of thought, be seen in the immediate, everyday-like nature of play, as well as in the small size of the game-related finds.

Back in Mohenjo-daro, we observe that a great deal of knowledge is missing concerning the heavy instances. Not much is known about how the societal structure was organized or who constituted its authorities. At the same time, we recall the traditional epithets of the settlement as enigmatic and faceless. Are we on these grounds to conjecture that it is actually the heavy instances that provide us with faces of past societal structures? Are we in that case to understand that we without these instances cannot cope with the settlement in question? Or, said in more exact words, that we are experiencing difficulties because of being unable to fit it into a recognizable and all-embracing model? If that is the case, we seem to have ended in a blind alley as concerns Mohenjo-daro. If imagining the heavy instances as essential parts in an existing, but in this case unreachable model, we seem to stand at the end of the way. From this point of view, we may call into question the meaningfulness of dealing with such small parts as game-related finds. If furthermore starting from the assumption that these reflect the pastime of adults, this kind of material – while perhaps not explicitly aimed at the education of children – must with necessity end up in a less important fringe.

The second perspective on play, the *adventure mechanism*, which addresses the unknown world of children's own culture, has according to Lönnqvist emerged as a criticism towards the more traditional studies emphasizing the aspect of usefulness (Lönnqvist 1992:79). Although both of the two points of view described by Lönnqvist explicitly handle the play of children, this second perspective can be suggested to belong to an alternative field within which play is regarded as a general, human phenomenon that is not only reserved for children. Scheuerl (1968) speaks in this connection about the *play theoretical* field, by which he refers to the very thinking concerning the essence of play. He claims that an incongruity prevails between this and the play pedagogic field, as the play theoretical field hardly has had any influence on the reform pedagogy (Scheuerl 1968:68).[4] The opposite content in what is here called the alternative

[4] Besides the works by Piaget (1999/1951), Huizinga (1955/1938) and Caillois (2001/1958), the work by Scheuerl can according to Fritz be seen as a classical work within the field of play (Fritz 2004:261f). It provides a thorough account of both

point of view can be made clear with the systematization of perspectives on play that is suggested by Fritz. This focuses on the direction of the view one chooses to follow. Different discourses on play can for example be directed on the future of the play process (here-and-then); on its past (here-and-before then); or on its present course (here-and-now). Following this way of thinking, we see that the traditional perspective of usefulness is directed on the future, on what may be of use in coming life situations. It is furthermore not focused on the play process as such, but on future situations in the real world, which gives a perspective of there-and-then (Fritz 2004:91ff). The alternative view on play, which is advocated by the adventure mechanism and which appears within the play theoretical field, represents with the terminology by Fritz in contrast a here-and-now-direction. In this, the play process in itself and its vitalizing power stays in centre, without the need for any "/…/legitimatization into the future/…/" (Fritz 2004:96, *my translation*). Schleiermacher, for example, who was a researcher during the mid nineteenth century, called the idea into question that play would be dependent on future use. We also find an emphasis on the present with Bühler from 1927 (Fritz 2004:96). According to this perspective, play turns into something that interrupts the (often boring) routines of everyday life, making life more alive. A key word in this connection is the pleasurable excitement, which, neither too weak nor too strong in nature, is searched for in play as well as maintaining play. One partakes 'with all one's heart' and is offered the possibility to "/…/experience oneself in a different way/…/" (Fritz 2004:97, *my translation*). One of the classical scholars in this field is Huizinga (1955/1938), who in his work *Homo Ludens* puts forward the thought that the quality of play in being illogical and fun constitutes a prime element in human cultural activity: "/.../the *fun* of playing, resists all analysis, all logical interpretation. As a concept, it cannot be reduced to any other mental category" (Huizinga 1955/1938:3). Objecting to the common way of ascribing functional qualities to play, Huizinga's play is highlighted as a basic element that both underlies and maintains human culture. Impossible to tear apart into 'useful' properties, play

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reform pedagogic and phenomenological perspectives on play, as well as diverse points of view found within these perspectives (Scheuerl 1968).

constitutes a "/…/well-defined quality of action which is different from 'ordinary' life" (Huizinga 1955/1938:4). In more recent times, researchers have in different ways taken a revised use of the theses by Huizinga. Asplund (1987) argues for example that although Huizinga does not make any difference between play and gaming, he is, with his markedly formalized definition of play, in reality handling gaming. While this according to Asplund is the same as 'organized play', Huizinga actually excludes a range of phenomena of a creative and improvising character that should be included within the sphere of play, such as unpredictability and breach of rules (Asplund 1987:64).[5] Play as a phenomenon of totality is furthermore advocated by Caillois (2001/1958), who emphasizes play as dependant on four basic, human central interests.[6] The circumstance that one in play partakes 'with all one's heart' can according to Fritz (2004:99) be said to become even more pronounced in the theory of flow by Csikszentmihalyi (e.g. Csikszentmihalyi & Bennett 1971). Play is according to Csikszentmihalyi and Bennett a state of things that appears as soon as the abilities of the actor match the requirements of the world around, so that a state of balance is attained. Play is action, "/.../a unified experience flowing from one moment to the next in contradistinction to our otherwise disjoint 'everyday' experiences" (Csikszentmihalyi & Bennett 1971:45). The remarkable thing that happens according to this theory is the melting together of the player with the surrounding world, or, more exactly, the melting together of the action and the consciousness. The consciousness concerns on the one hand the attention generally, which becomes totally directed on the play action. On the other hand, and above all, it concerns the disappearance within play of the self-consciousness, the 'I'. While we in real life are upholding a "/.../dualistic self-other awareness/.../" and struggle for advantages, we may in play, in which the rules are few and the boundaries are clear, completely abandon ourselves. With this line of thought, play can appear in all kinds of situations, including

[5] For a reasoning that applies the concepts by Huizinga on today's division between work and play, see Sundin 1987.

[6] An accentuation of play as an immanent essentiality in every human being can also be found with Hübner (1992:134), who writes about ancient Palestinian games and game utensils.

what is commonly regarded as work (Csikszentmihalyi & Bennett 1971:46f). In the view maintained by Fritz, play emerges as an elementary power directed towards development and openings. In order to be active, this power demands and offers spaces for possibilities, which can make the 'yet-not' available. These spaces turn into spaces for mediation between the exterior and the interior with an influence on the real world (Fritz 2004:259f).[7] Coming this far, instead of that irrational appendage that play, without its aspect of usefulness, just now seemed to represent, play appears as something markedly fundamental, something that is both clearly outlined *and* interwoven. Play seems capable of appearing in all kinds of contexts, including very short ones such as within a meaning wink or a gesture. While it from the more traditional, use directed viewpoint appeared as a separated, isolated part, it now unfolds in the form of *relations*.

We return one more time to Mohenjo-daro, where the absence of the heavy instances seem to keep us from reaching an all-embracing picture of the settlement (and to prevent us from feeling familiar?). By now, however, having the alternative perspective of play in our luggage, some doubts present themselves. Firstly, in the quality of a fundamental part in human life, play now appears as more suitable as the lowest common denominator than more abstract terms such as 'form of administration' or 'ideology'. Secondly, if we imagine the heavy instances as the building bricks of the past societal structure, we may at the same time think about the cement that should have joined these together. In the light of play as intricately interwoven and involved, play should have constituted an essential part within such cement. We may in other words see the game-related finds – while constituting our tangible traces of play – as contributors to such cement. This gives the finds a totally different and more central location than the fringe within which we placed them earlier. With focus directed on this cement in the shape of people's multiplicity of (play) relations, it becomes in turn possible to question the 'all-embracing whole', which we until now thought missing. We do not only need to doubt whether it ever, out of the fragments that have been left to us, can be reached. Can it exist at all? With this view,

[7] For the reasoning by Fritz concerning an alternative approach on play, see Chapter 6.

our endeavour for wholeness does not only turn into a constructed problem, but the traces of this wholeness – those fragments or remains that we have at hand – cease to be such traces. The fragments are in other words no longer as obviously parts of a *Something*.

1.2. Aim

Out of this reasoning, two essential questions can be seen to crystallize. The first question concerns how we can illuminate that fundamental, un-structured and irrational element that is play from a generally scientific, and specifically archaeological perspective, without losing sight of this unstructured element? The second question can be said to be built into the former. This question is about whether we can find alternative ways to the view that sees fragmented materials as parts of a (incomplete and 'familiar') Something. Is it possible to present these parts as adequate and complete unities in themselves instead? While the latter question forms something of a prerequisite for the former, they can, viewed together, above all be said to concern an aim for an *alternative way of working*.

With this, we dare to approach Mohenjo-daro a fourth time – with our sight still directed on the game-related finds of the settlement.

1.3. Disposition

In Chapter two, *Picturing the Bronze Age Indus Valley: a short review of old and new research perspectives*, Mohenjo-daro is set in its geographical and research historical context. The description starts within Mohenjo-daro and proceeds successively outwards, providing the reader with different 'faces' of the settlement. In Chapter three, *A lens on games: research on game boards, game utensils and (board) games*, the outward movement turns and goes inwards again; this time with an alternative research historical starting point focused on remains of, and research on, ancient games in the area. In Chapter four, *Grounding Archaeology, Avoiding Absoluteness: the development of method*, generally

scientific, as well as specifically archaeological perspectives and ways of working are critically reflected upon. Based on these, a theoretically grounded method is developed, in which the materials of study can be handled as autonomously working unities, and which consists of different ways of testing. The method is outlined in the form of a grid, made up of four rows each built up of four compartments. In Chapter five, *Game-related materials and archaeology: a deconstruction of documentation and publications of Mohenjo-daro*, the empirical materials – game-related finds from the area of DK-C in Mohenjo-daro – are tested via older, published and unpublished, written sources. The main aim is to examine in which ways the game-related finds can be studied despite being impaired by problems as to the source situation. Another aim is to see whether the finds have an archaeological 'information potential'. Here, the working grid built up in the previous chapter is used in a more practical way. The bottommost level, termed Basement, is meant to ground the analysis in prevailing, excavational circumstances. In Chapter six, *Play Matters: thoughts on the terms of play*, the aim is to reach the social significance of play from an archaeological point of view. In practice, this constitutes a testing of different theoretical lines of thought and methodological ways of working. The reasoning builds on selected results from the analysis of the previous chapter. Here, again, the way of working follows the working grid of chapter four, which in this chapter is used in a more theoretical way. The character of testing is obtained by the placement of four different play spectra at the top of the grid, against which the reasoning is continuously mirrored. In Chapter seven, *Gaming in Mohenjo-daro – an Archaeology of Unities: conclusions*, play-related and methodological aspects of the previous chapters are summarized and briefly reflected upon. In Chapter eight, *The Method of Play: summary and visions*, the complete work is summed up and formed into future outlooks.

2
Picturing the Bronze Age Indus Valley – a short review of old and new research perspectives[8] –

Es gibt sehr Viele die Geschichte schreiben
Aber Wenige die sie dann durchleiden.
-Tombült, *Sternzeit (4. Strophe)* (2002)

2.1. The urban settlement of Mohenjo-daro

The Bronze Age Indus Valley site of Mohenjo-daro lies 450 kilometres north of Karachi and about 40 kilometres from the district city of Larkana in the province of Sindh, southern Pakistan. At the time of the settlement, it was situated close to the west bank of the river Indus, which now runs about two kilometres away (Jansen 1986:55, 1993:16) (fig. 2.1.). The site is surrounded by a farming landscape that gets its water from the mighty river. It lies in a semi-arid climatic zone and where the water does not reach the steppe-resembling surrounding is covered with tamarisks (Jansen 1993:20f). Average rainfall is less than 130 millimetres per annum and most rains fall in July and August (Saeed 1998:13). Mohenjo-daro constitutes the largest of the Bronze Age Indus Valley or Harappan urban settlements, exhibiting an inhabited area greater than 250 hectares (Kenoyer 2000:49f). It has been appraised that the excavated parts cover less than 10% of the settlement's total area. However, drill probes undertaken in more recent time have shown that the settlement stretched at least 2 kilometres further towards the east. This extends the hitherto documented area and suggests a higher population figure than the estimated about 35 000 (Jansen 1993:31, 124f).[9] The appearance of

[8] Parts of this research survey can be found in an earlier work (Rogersdotter 2008). The survey does not claim to be complete but constitutes a discussion on selected, old and new research approaches.
[9] Wright suggests that none of the urban cities had more than 50 000 inhabitants (Wright 2010:16).

Mohenjo-daro as fully-formed urban settlement is set to around 2400 BC (Jansen 1987:15).

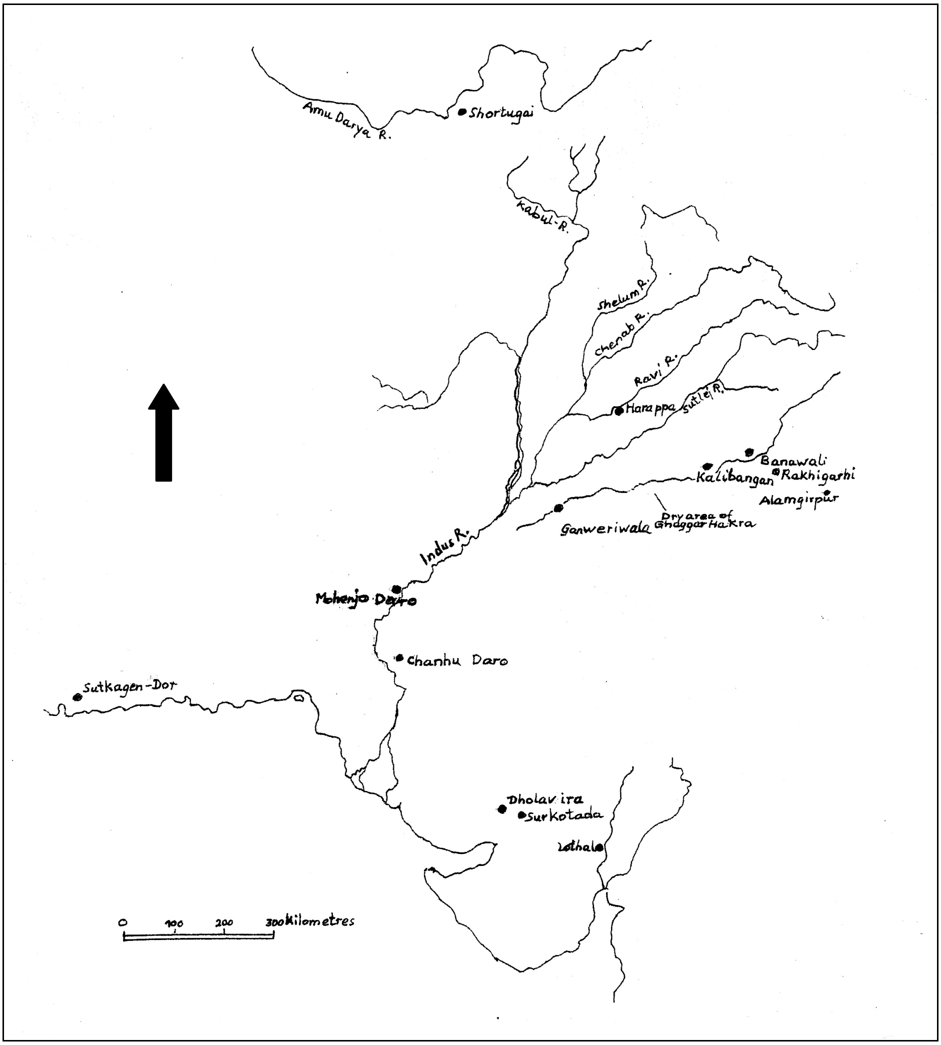


Fig. 2.1. The Bronze Age Indus Valley region (slightly modified by the author, after Parpola 1994:Fig. 1.3.).

It flourished for about 500 years after which it declined. The final period, termed Post-urban/Jhukar for the region of Mohenjo-daro, the Lower Indus, is set to 1900-1700 BC (Wright 2010:310).[10] [11]

The brick city

The western mound of the settlement, the 'upper town', is crowned by the remnants of a Buddhist stupa belonging to a much later time (the Kushana Period of the second century AD), which is built on top of the Bronze Age remains (Saeed 1998:15) (fig. 2.2.). The mound rises about 18 metres above the alluvial plain, and has for different reasons been thought of as having served public functions (Jansen 1993:31, 53). The mounds of the 'lower town' spread out towards the east (fig. 2.3.). They consist of about 300 buildings in densely built and separated neighbourhoods, intersected by broad, roughly parallel streets and zigzag-resembling lanes. The mounds of the 'lower town' rise about eight metres above the surrounding, flat landscape. This area stretches about 1000 metres in a north-south going direction. In the north it extends about 500 metres from east to west and in the south about 700 metres (Jansen 1993:31, 54). The mounds or sectors have been named

[10] The Harappan period may be alternatively approached by use of the concept of cultural *tradition* by Shaffer (1992). In contrast to established periodical classifications and the isolated character of these, the concept refers to a more open way of grouping archaeological assemblages in which the need for fixed boundaries and precisely defined cultural and chronological links is reduced. The traditions are subdivided into *eras* of a more all-embracing nature that emphasizes the long-term (and interrelated) development of human adaptations. The eras are divided into an Early Food Producing-, a Regionalisation-, an Integration- and, lastly, a Localisation Era. Each of the eras encompasses in turn one or more *phases*, usually divided according to a specific ceramic style and referring to one or more specific sequences within the geographic area of the tradition in question. Thus, in the particular Indus Valley Tradition, the total time bracket stretches from pre-6000 BC to at least 1500 BC. The Integration Era, which is characterized by marked cultural homogeneity and consists of only one, single phase, the Harappan, refers to the urban developmental stage of this tradition, that is, a period dated to ca. 2500-2000 BC.

[11] The term 'Jhukar' refers to a distinct pottery style that appears at the end of the Post-urban period, both at Mohenjo-daro as well as at some other Indus settlements in the region (Wright 2010:317).

after their different excavators. The 'upper town' consists mainly of the Stupa area and the SD



Fig. 2.2. The Buddhist stupa of the 'upper town', Mohenjo-daro, seen from the south (photo by the author).

area (after A. D. Siddiqui [Jansen 1986:50]), while the area towards the south is named the L area (possibly after B.L. Dhama [Morio 2007:28]).[12] To the north in the 'lower town' lies the DK-G area (after K. N. Dikshit), further south the VS area (after M. S. Vats), which to its south, at the other side of a deep depression, becomes the HR area (after H. Hargreaves). Further eastwards lay the smaller sized DK-A, B and C areas as well as the Moneer or DK-I/D area (after Q. M. Moneer).[13] A 10 metre wide street, named First Street, constitutes a

[12] The 'upper town' also consists of the REM-area (after M. Wheeler), the ACC-area (probably after L. Alcock), a small area also called SD (probably after Sadar ud Din), the DM-area (after B.L. Dhama) (Jansen 1986:50, 120), and the area or trench F (Ardeleanu-Jansen, et al. 1983:45, 50 and Pl.2). Three areas labelled 1, 2, and 3 in the 'upper town' and north of the 'upper town' constitute the locations of excavations conducted by R. D. Banerji (in 1922-1923) (Ardeleanu-Jansen, et al. 1983:45).

[13] An area labelled 4 in the 'lower town' (in the VS-area) represents the area excavated by M. S. Vats in 1923-1924 (Ardeleanu-Jansen, et al. 1983:45). An area or trench D′, an area or trench E′, as well as an area or trench H are also to be found in the 'lower town' (in the northwestern part of the VS-area, east of the DK-G area, as well as east of the northern end of First Street, respectively) (Ardeleanu-Jansen, et al. 1983:45 and

major thoroughfare that runs in a north-south direction through the DK-G, the VS, as well as the HR areas (Jansen 1993:24, 54).

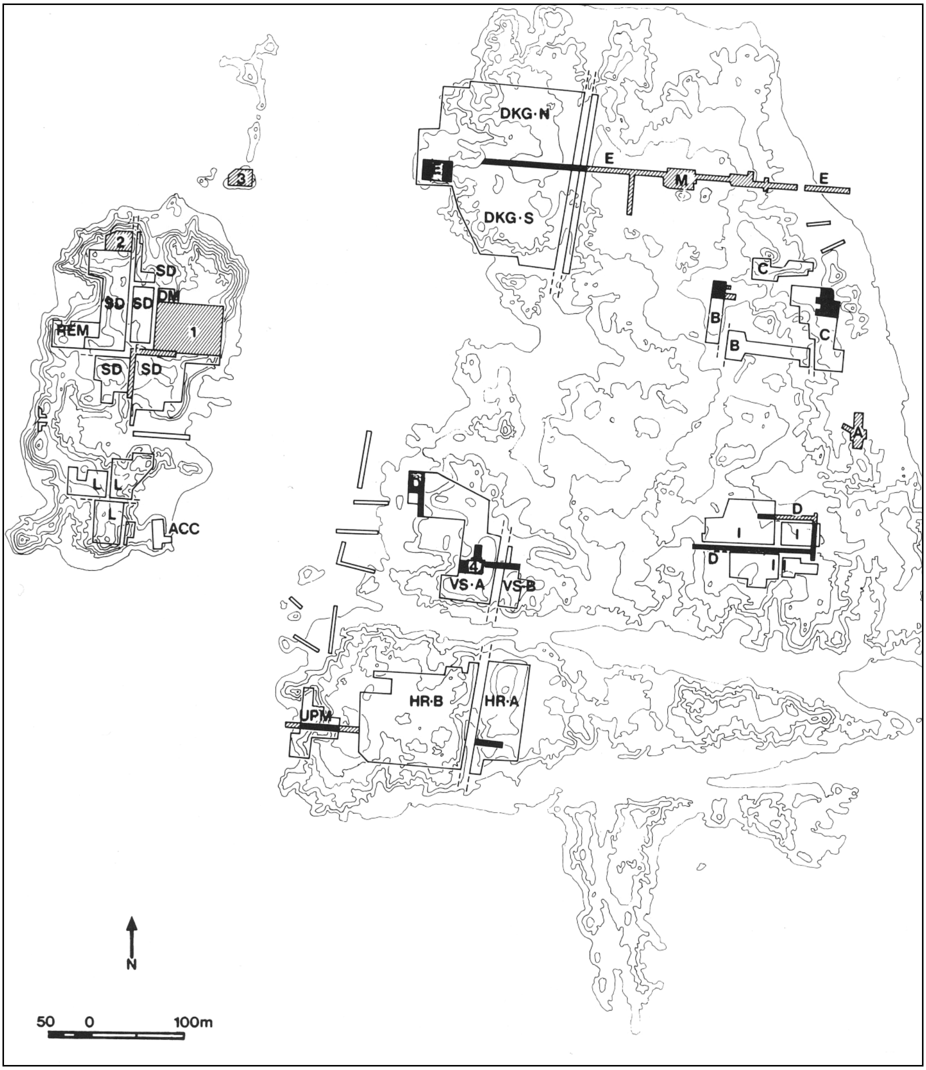


Fig. 2.3. Plan of the settlement of Mohenjo-daro (slightly cut down by the author, after Jansen 1986:Fig. 27).

Pl.2; Franke-Vogt 1991a:17ff; Marshall 1931c:11f). The area UPM (at the western end of the HR-area) represents the location of the excavation undertaken by G. Dales in 1964-1965 (Franke-Vogt 1991a:15).

Further east, DK-B is divided by a further, nine metre wide street which in its north-south going direction runs parallel to the First Street, 170 metres towards the west. This makes it probable that this second street constitutes another of the settlement's major thoroughfares (Jansen 1993:76; Scholz 2005:32). The east-west going depression between the VS and the HR area may possibly constitute another major street axis (Jansen 1993:54).

DK-G area is the most extensively excavated area (28 000 square metres). It is also the only area in which large-scale deep digging has been conducted. It is usually referred to as DK-G South and DK-G North, respectively. The field registers show more than 12 000 registrations for this area. The VS area is divided into the A and B sub-areas. HR area, also divided into A and B sub-areas, represents with its almost 20 000 square metres the second largest excavated area (Jansen 1993:56, 63). The Moneer area is about 7 200 square metres in size and represents a late settlement phase. DK-A, situated southeast of DK-B and C, represents with 400 square metres the smallest area. DK-B and C connect to each other, with DK-C lying east of the latter (Jansen 1993:72, 75). These two areas encompass an area of 11 800 square metres (Scholz 2005:32). DK-B also represents a late settlement phase. DK-C is approximately 7 800 square metres in size (Scholz 2005:32).

One of the hallmarks of the settlement is its extensive use of average sized, baked and sun-dried mudbricks. These appeared in two sizes following the standard ratio of 1:2:4 (Kenoyer 2000:56). Through drill probes and trench excavation in later time, it has been possible to establish that the settlement was at least partly built on colossal platform substructures of mudbrick. This enabled an elevation of more than 10 metres above the surrounding plain, which gave better protection from floods (Jansen 1986:195ff, 1987:12f, 1993:124f).[14] The buildings of the settlement were made of baked and/or sun-dried mudbricks (Wright 2010:242). Both exterior and interior walls were made of baked mudbricks (Marshall 1931d:15), and provided with right-angled shapes. Individual residences,

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[14] Particular buildings were in addition provided with own, separate substructures; for more on the various ways of elevating buildings or parts of buildings, see Jansen 1986:197.

sometimes with two storeys, lined the streets. The entrances of these buildings, however, probably only opened to the smaller lanes (Parpola 1994:8). Windows on the ground floor were normally few. Typical houses consisted of several rooms with a courtyard either at the northern side of the house or in the centre (Wright 2010:242). Houses were of different sizes. To a certain extent, they conformed to a number of standardized "residential models", which could be further extended by the adding of more rooms (Sarcina according to Wright 2010:242ff). Streets and lanes were unpaved, with the exception of First Street that at the depth of 18 feet seemed to have some kind of paving made from brick parts and potsherds (Jansen 1993:78ff).

The water city

Another hallmark of the settlement was the, for its time, unique water supply- and drainage system (Jansen 1993:16). Fresh water could be obtained from draw wells which, cylindrically formed and built of specially made wedge-shaped bricks, display a high technical standard. Estimations suggest that the settlement may have had more than 700 wells, which in average would be one well in every third house (Jansen 1993:16, 117f). Almost every house was further equipped with a 'bathroom'. This contained a bathing platform that, placed along an outer wall, sloped towards an outlet that was connected to the street drainage system or sometimes to a large pot. In connection with the bathing platform were also toilet facilities (Jansen 1993:16, 119ff). The drainage network encompassed the whole settlement. The drains, dug down under the street level, ran generally along the sides of the streets. They were made of bricks and clay mortar and covered by bricks that could be removed for cleaning. In connection with the drains were also cesspits and open soakpits. The main purpose of the drainage system was according to Jansen to carry away domestic effluent (Jansen 1993:78, 118f). In connection with the water supply system must one of the most famous structures of the site be mentioned; the Great Bath located in the 'upper town' west of the stupa area (fig. 2.4.). This consists of an about 1 800 square metres large complex with a rectangular brick basin in the centre, reached by

a flight of steps at each of its narrow ends. The complex does not belong to the original structuring of the area but was erected at a later time (Jansen 1993:16f, 37).[15]

The absence of monumental and other 'classic' features

Besides the Great Bath, other more unique structures of the settlement include the Granary west of the Great Bath, as well as a structure somewhat similar to this in DK-B (Jansen 1993:49f).[16] There are a few, unusually large and/or otherwise exceptional structures to be found, such as block 1 (the 'Chief's house' or 'Caravanserai') and block 18 in DK-G South; House VIII in Block 3 and House I in Block 1 in HR-A; and a building complex between blocks 5 and 7 in HR-B.[17]

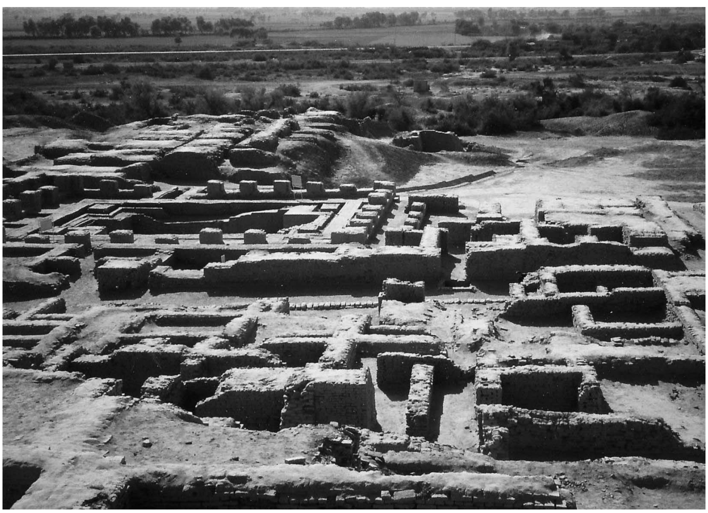


Fig. 2.4. View from the Buddhist stupa westwards, Mohenjo-daro. The Great Bath is located in the centre left (photo the author).

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[15] For more detailed information concerning the Great Bath, see Jansen 1993:37-48.

[16] The identification of the building as a granary has in more recent times been put in doubt by a number of scholars; see e.g. Jansen 1991:147; Kenoyer 2000:64f; Possehl 2002:247f. For more details on the structure, see Jansen 1993:49ff.

[17] The last mentioned building consists of 16 two-room-structures arranged opposite each other along a north-south going axis. According to Jansen (1993:68), this has by earlier scholars been suggested among others as servants' quarters, as well as the living quarters of priests or a police force.

Block 1 in the HR-A area has possibly served as a temple due to its unusual structural appearance and material outfit (Jansen 1993:61ff, 68, 86).[18] However, generally speaking, a third characteristic feature of the settlement is actually the absence of structures that on the basis of size and appearance could be convincingly interpreted as temples or other monumental buildings such as palaces (Mackay 1931b:284; McIntosh 2002:108). As to the nature of the artefacts, finds of 'monumental' character, such as large statuary, are also absent. A few smaller, human and animal statuettes of stone, shell and copper have turned up at different locations of the settlement. On the other hand, one of the most numerous and varied kinds of objects are small, human and animal figurines in terracotta (Ardeleanu-Jansen 2002:205). Among the most well-known types of artefacts are the small seals mostly made of steatite. These commonly depict various figures, mainly animals, as well as a few signs of a writing system that is as yet undeciphered.[19] These are commonly associated with trade, where they may have been used for the sealing of goods for protection and identification (Ratnagar 2001:58ff). During the urban period, there are few signs of craft activity within the settlement (Possehl 2002:212).[20] The settlement has furthermore not as yet revealed any cemetery (Wright 2010:268). Some skeletal remains have been found at different places at the site, most of which were probably from later times when the settlement was already abandoned (Wright 2010:269).

Building sequence and decline

It is not known whether there were any settlements before the beginning of the urban period of Mohenjo-daro, since its lowest suspected layers lie hidden and unreachable under the raised ground

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[18] The artefact assemblage, comprising about 600 recorded finds, fell almost entirely into the 'prestige' category (referring to objects not meant for everyday usage) (Jansen 1993:68).

[19] For comprehensive information on the work on decipherment, see Parpola 1994, 2009.

[20] According to Vidale and Balista (1988:96) signs of metal working and pottery firing are more or less absent, while smaller workshops producing such things as luxury ornaments and seals were present.

water level (Jansen 1986:195f, 1993:124). The foundation platforms and the urban settlement is thought to have been planned and built during a short period of time, not more than 80 years (Jansen 1987:15). The earliest structures were of more massive brick constructions. In later time, the walls became thinner and the masonry poorer (Wilkins 2005:139; Mackay 1931a:236, 1931b:271). In the latest period of occupation, some houses opened directly into the streets. During this period, the settlement shows evidence of a markedly crowded character with a carving up of housing (Jansen 1986:203; Wright 2010:242, 316f). During this period (the Post-urban), large, non-domestic structures such as the Great Bath were abandoned and overbuilt by smaller living quarters showing traces of craft production. This has been taken as further signs of 'decline' and subsequent loss of civic qualities (Jansen 1993:47f, 125). Traces of substantial craft activity have also been reported from the southern portion of the DK-G area (Possehl 2002:212; see e.g. Shaikh & Shar 1988). Sudden channel displacements of the river Indus are pointed at as a contributing part in the decline of Mohenjo-daro (Wright 2010:312). However, as Jansen states, the settlement probably never went through a quick, dramatic end. While the municipal infra-structure was subsequently lost, the findings of some typical Harappan objects in the uppermost layers indicate that traditional crafts continued to flourish for a while (Jansen 1993:48, 124). According to Wright, the architectural disruptions appear to have started during the latter part of the urban period, after which a rather rapid abandonment of the settlement followed by the end of the Post-urban period (Wright 2010:316f). An alternative perspective is given by Wilkins (2005), who suggests that a trend towards more 'flimsy' or lighter construction was actually inbuilt in the conservative building technique. Therefore, it had already begun at least from the start of the urban period. The architectural 'decline' would with this view become much more gradual and less dramatic.

2.2. Digging history: picturing Mohenjo-daro and the Bronze Age Indus Valley

The discovery and large-scale excavations

In the beginning of the 1920s, initial excavations were undertaken by the archaeologists Rai Bahadur Daya Ram Sahni and Rakal Das Banerji of the Archaeological Survey of India (ASI) at the sites of Harappa in today's province of Punjab, Pakistan, and Mohenjo-daro, respectively. In the year of 1924, the British archaeologist Sir John Marshall[21], then Director General of the ASI, announced to the scientific world the discovery of a new Bronze Age civilization that was about as old as the ancient Mesopotamian and Egyptian civilizations (Choksi 2002:274; Jansen 1993:22f; Possehl 2002:11f; Urban 1991:18f; Wright 2010:4ff). After this, excavations were gradually intensified. The comprehensive work that was later compiled by Marshall (1931a) encompasses in total five winter seasons of excavations between 1922 and 1927 (Marshall 1931b:viii). Before the large-scale excavation started, there were two seasons of opening trial trenches. In the season of 1923-1924, the work was led by the archaeologist M. S. Vats, and trenches were sunk in the VS area (Marshall 1931c:11). In the season of 1924-1925, under the leadership of the archaeologist Rao Bahadur Kashinath Narayana Dikshit (Possehl 2002:12), the work could be conducted on a larger scale. Series of short trenches were opened in the DK-A, B and C mounds, while longer trenches, D and E, were dug to the south and north of these. In addition, Dikshit also cleared some of the structures through which the trenches ran (Marshall 1931c:11f). Trenches were also opened in the 'upper town' (trench F) and in the northwestern part of the VS area (trench D′) (Ardeleanu-Jansen, et al. 1983:Pl.2; Franke-Vogt 1991a:17ff). According to the Annual Report of the Archaeological Survey of India (ARASI), 7 152 registrations of finds were made during this season (ARASI 1990/1925:71). In 1925-1926,

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[21] Marshall was appointed the post as Director General of the ASI at 26 years of age. He held the post from 1902 to 1927, and came during that time to have a great influence on the cultural understanding of the Indian subcontinent (Jansen 1986:18ff). For a comprehensive account on Marshall's years in India, see Lahiri 2006.

Marshall started a large-scale excavation of the site, in which most of his staff participated and which made use of 1 000 to 1 200 labourers (Marshall 1931c:12). During this season, the archaeologist H. Hargreaves excavated parts of the HR area, while Vats continued in the VS area and Dikshit cleared the mounds of DK-B and C. Marshall worked together with B. L. Dhama and A. D. Siddiqi in the SD area and unearthed among other things the Great Bath (Marshall 1931c:12). During this season, buildings such as living quarters and a small museum for the finds were erected at Mohenjo-daro. A road was also made to the site from the railway station at Dokri. Neither Marshall nor anybody from his staff had the possibility to devote their full time to the work at Mohenjo-daro. Therefore, from 1926 onwards, Marshall appointed an archaeologist from 'outside', the American archaeologist Ernest John Henry Mackay[22], as a whole-time officer for Mohenjo-daro (Marshall 1931c:13; Possehl 2002:13). This decision of Marshall's was also due to the significance which he attributed to this newly discovered civilization: "[i]t was my anxiety to ensure that the exploration of Mohenjo-daro and the publication of these valuable materials should lack nothing which expert knowledge could supply/…/" (Marshall 1931b:ix). The season of 1926-1927, however, Mackay, in order to get used to the local conditions, worked under Rai Bahadur Daya Ram Sahni. While the latter continued work at the HR and VS areas, Mackay concentrated on the L area (Marshall 1931c:13). Thereafter, and during the four winter seasons between 1927 and 1931, Mackay directed excavations in the DK-G and SD areas in Mohenjo-daro (Mackay 1938b:xi).[23] They were on a minor scale, but still employed about 600 labourers (Mackay 1938b:xii). In 1931, the excavations had to be stopped due to financial problems (Possehl 2002:14). After this, only small-scale excavations were undertaken at the site. In 1932-1933 and 1935-36 small-scale excavations were conducted in the southern part of the lower city, east of the VS area, led by Q. M. Moneer and Puri (recorded as the DK-I area and later re-

[22] From 1919 to 1922, Mackay was Custodian of Antiquities in Palestine. In 1922, he was appointed field director of the Field Museum-Oxford University Archaeological Expedition to Mesopotamia. He joined the ASI in 1926 (Possehl 2002:13f).

[23] In 1931, Mackay also dug a trench named H, situated east of the northern end of First Street (Franke-Vogt 1991a:18).

named as the Moneer area) (Jansen 1983:25). The results of this were never published and the area was re-discovered by Jansen 1981 (Jansen 1993:24). Excavation was also undertaken in the southern part of the DK-B area by A. Rahman in 1938 (Jansen 1983:25).

On stratigraphy[24]

Marshall maintained that seven strata could be distinguished at the site. Based on what seemed to be clearly defined breaks, these were in turn divided into three periods: the Late Period (strata 1-3), the Intermediate Period (strata 4-6), and the Early Period (stratum 7). The divisions depended solely on the structural remains, among other reasons due to the similarity encountered among the artefacts: "the minor antiquities at Mohenjo-daro exhibit so little variation in type, that it is hardly possible to discriminate those of one stratum from those of another/…/" (Marshall 1931c:9f). Save for a few occasional trenches, however, there was no real deep digging conducted until and including the season of 1926-1927 (Mackay 1938b:xi; Marshall 1931c:13). When Mackay took charge, he undertook deep digging in parts of the area of DK-G in order to reach at the lowest levels of the settlement's history, taking care in measuring the level of every building, every well and every artefact that was found (Jansen 1986:52; Mackay 1938b:xif).[25] He continued to use the tabled strata set in the earlier excavations with a few adjustments (Mackay 1938b:xiv).[26] However, his deep digging technique soon became heavily criticized (e.g. Wheeler 1954). He assumed that the whole settlement had grown synchronously in a vertical direction, which

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[24] For more details on the horizontal and vertical orientation systems used, see Chapter 5, sub-chapter 5.1.

[25] A 'lowest level' could however never be reached, since the excavators at a depth of 38 feet and 5 inches below datum encountered the ground water table (Mackay 1938c:43).

[26] Mackay thought that it was actually the Late II Phase that marked the beginning of the Late Period, and that the Intermediate III Phase constituted the last phase of the Early Period (Mackay 1938b:xiv).

today has been proven to be totally incorrect.[27] The different strata were therefore distinguished following absolute depth designations (Jansen 1986:52f). This has the effect that the division into periods by Mackay unfortunately has no stratigraphic significance, which in turn leads to the circumstance that all interpretations based on this become erroneous. More detailed studies such as the development of artefacts are also made impossible (Jansen 1993:82ff).[28] [29]

Later excavations

When the British archaeologist Sir Mortimer Wheeler became Director General of the ASI in 1944, a new interest awakened for Mohenjo-daro and Harappa. Wheeler undertook excavations of the ′upper towns′ in Harappa as well as Mohenjo-daro (Jansen 1993:26f). In 1950, he undertook three different excavations at the latter settlement. To begin with, he excavated what came to be known as the Granary. He also carried out a deep digging at the western end of this structure (this area came to be known as the REM area). A second excavation was done of the southeast corner of the 'upper town' (the ACC area), in which Wheeler thought he could see the remains of a fortification. A third excavation was probably undertaken south of the REM area (called the SD area – but not to be mixed up with the SD area including the Great Bath complex). The results of the excavations were however never published (Jansen 1986:52, 119f). No further excavations were conducted until 1964-1965, which became the last season of excavation at Mohenjo-daro. The American archaeologist

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[27] The way of building and re-building has more recently rather been supposed to have been of a kind where areas with small housing came to grow vertically faster than areas with larger buildings. This led most probably to a markedly uneven topography. For more details on this, see Jansen 1986:202.

[28] Mackay's horizontal section-plans from the DK-G area are in other words not displaying different stages in the building of the settlement, but constitute solely ″/.../horizontal cross-sections at the respective depths″ (Jansen 1993:84ff).

[29] Jansen suggests that at least a rudimentary stratigraphy can be reconstructed through a re-investigation of the drain network. However, as he asserts, a definite stratigraphy cannot be reached at by studying the hydraulic installations alone; it must include a re-investigation of structures and objects as well (Jansen 1993:82f, 95).

George Dales excavated a small part at the western end of the HR area (known as the UPM area), where he thought the remains of canals or fortifications could perhaps be traced. He also aimed at a stratigraphic sequence. The excavation was planned for three years but had to be interrupted after one season (Franke-Vogt 1991a:15; Jansen 1993:28, 54; see e.g. Dales 1965; Dales & Kenoyer 1986).

Synthesized pictures

After the large-scale excavations, a synthesized picture of what Mohenjo-daro and Harappa constituted emerged, a picture that was largely the one of Marshall, but was shared and further worked upon by Mackay as well as the Australian archaeologist Gordon Childe (Possehl 2002:15). Here, the backgrounds of Marshall and Mackay naturally play a part. Marshall was trained as a classical archaeologist but had a long experience and knowledge of the Indian subcontinent. Mackay for his part had long experience of field work in both Egypt and Palestine. He had also directed excavations in Jemdet Nasr and Kish in Mesopotamia (Marshall 1931b:ix; Possehl 2002:14; Wright 2010:11). Marshall saw Mohenjo-daro and Harappa as representing a civilization like those of ancient Egypt and Mesopotamia. He was not of the opinion that the origin of this civilization was to be found in Mesopotamia, but maintained that parallels could be searched for between this and Sumer and the proto-Elamites due to the geographical closeness. Concerning Mohenjo-daro and Harappa, the remarkable uniformity between the two cities was emphasized, at the same time as aspects that were typical and unique for this civilization were lifted forward. Marshall entertained great knowledge of Indian traditional thinking and it was therefore very characteristic of him to undertake ethnographical comparisons as well as accentuate a continuity between the Indus civilization and the present (Possehl 2002:16, 19). He attached specific importance to discussions on Indus religion. Here, he pointed among other things to the existence of the beginnings of Shaktism, and the presence of a male god and a female mother goddess (Marshall 1931f:49-58; Possehl 2002:16). Marshall and Mackay both thought of the structures of the ’upper town’ as having been used for cultic practices (Jansen 1993:53). Without evidence for

warfare or grandiose, monumental architecture, they both saw the Indus civilization as peaceful, inhabited by urban merchants and craftsmen (Wright 2010:11f). They related the relatively fast accumulation of building levels which they observed at Mohenjo-daro to "/…/the ever present menace of inundation" (Marshall 1931c:8). In line with this idea, they thought devastating floods had caused the destruction of the settlement (Jansen 1986:56).

Wheeler's background within Roman archaeology in Britain, as well as his experiences as a Brigadier General in World War II, are usually put forward in connection with the militaristic picture of the Harappan region which he painted up together with the British archaeologist Stuart Piggott (Possehl 2002:17f). Addressing one of the most famous Harappan artefacts, the 'Priest-King' in steatite which was found during the large-scale excavations in the DK-B area, they described the Harappan realm as a theocracy, controlled by priest-kings residing in the twin capital cities Mohenjo-daro and Harappa (Jansen 1993:76, 2002:105; Ratnagar 2001:115; Wheeler 1968:5, 86f). The 'upper town' was thought to have had military purposes and was named a Citadel, from which the city could be defended. Wheeler was influenced by the Mesopotamian city-states and was of the opinion that this idea had been transferred from Mesopotamia. He thus connected to the thought of an 'Indo-Sumerian civilization', which Marshall had advised against (Jansen 1993:28, 53; Possehl 2002:18). From Piggott, he also borrowed the assumption that Mohenjo-daro was founded on a grid layout, by which the different neighbourhoods came to appear as large blocks similar to the Roman *insulae* (Jansen 1986:127). As to the idea of uniformity, Wheeler was of the same opinion as Marshall and talked about a significant 'sameness' to be seen (Possehl 2002:19). To this picture belongs the thought of a two-tiered society, in which a single priest-king dominated over an otherwise undifferentiated population (Wright 2010:271). Another part of this picture is the idea of the sudden downfall of the civilization caused by the slaughtering of the Harappans by Aryan invaders (Jansen 1986:128).

More recent work

The old work done on Mohenjo-daro and the ideas built from it did not become re-evaluated until 1979. Then, a German research team based at the Rheinisch-Westfälische Technische Hochschule Aachen (RWTH Aachen University), under the leadership of G. Urban and M. Jansen started the "German Research Project Mohenjo-daro" (*Forschungsprojekt Mohenjo-Daro*) in order to re-evaluate the settlement. From 1981, the team cooperated with researchers from the Italian Mission to Mohenjodaro (IsMEO) under the leadership of M. Tosi (Franke-Vogt 1991a:15; Jansen 1983:21, 1986:192). The site Mohenjo-daro was added to the UNESCO World Heritage List in 1979. Since then, rescue operations held by UNESCO have been undertaken in order to save the settlement from a rising ground-water level and from oversalination of the soil, both caused by artificial irrigation (Jansen 1993:28ff).[30] Parallel to this, and due to a ban by UNESCO to undertake further excavations at the endangered site, the work on re-evaluating the settlement has consisted of various 'non-destructive' means of investigation. This has included detailed architectural documentation of the whole settlement among other things with the help of aerial photography, sedimentary analysis and geophysical examinations.[31] During this time, field registers and other kinds of find recordings from the large-scale excavations of the 1920s and 1930s were also re-discovered.[32] The overarching aims have among other things been to understand the building sequences and re-consider the chronology of the settlement (Jansen 1983:21, 1986:192ff, 201). The work has for example included in-depth examinations on the extensive water supply- and drainage system (see e.g. Jansen 1979:145-157, 1993). Also, partly with the help of the new-found field registers, attempts have been made to define structures in multiple ways, such as through studying the sequential access system, and

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[30] For more on the destruction of the ancient bricks through salts and the rescue operations of walls, see Ludwig 1983; Urban 1983.

[31] For a comparative study of old and new photographs of various parts of the settlement, see e.g. Jansen 1993. For an account of geophysical examinations of remains of craft production, see e.g. Cucarzi 1984; Vidale & Balista 1988.

[32] For a re-written version of the field register for the HR area, see Jansen & Urban 1985a.

through the relocation of finds. This has been undertaken for the Great Bath, as well as for Houses I and VIII in the HR area (Ardeleanu-Jansen, et al. 1983; Jansen 1984, 1985). The extensive work by Franke-Vogt (1991a)[33] on the iconography of the seals, seal impressions and tablets from Mohenjo-daro, including a relocation of the finds, must in this connection be mentioned as well. Also, the work by Ardeleanu-Jansen (1993)[34] on the terracotta figurines from Mohenjo-daro.

The Indus Valley realm

Until today, about 1 500 Harappan sites have been identified. As the geographically largest of the early civilizations, it covers an area of more than one million square kilometres, stretching from Shortugai in Afghanistan in the northwest to Daimabad near Bombay in the southeast, and from Sutkagen-dor on the Makran coast in southwest Pakistan near the Iranian border to Alamgirpur adjacent to New Delhi in the northeast (Jansen 2002:105; Parpola 1986:399) (see fig. 2.1.). The centres are found within the river systems of the Indus and the Ghaggar-Hakra (Wright 2010:1). Most of the about 1500 sites are identified as small villages, others as towns or small cities (10-50 hectares), while five sites are recognized as major urban centres: Mohenjo-daro, Harappa, Ganweriwala, Rakhigarhi and Dholavira (Kenoyer 2000:49f).

2.3. Recent thoughts and approaches

Uniformity versus variability

Today, most Indus scholars object to the traditional homogeneity model of the Indus Valley (Wright 2010:271), expressed as a "Pan-Indus system" (Ardeleanu-Jansen 1993:6). This includes critical reconsiderations on the idea of monotony and the picture of

[33] See also Franke-Vogt 1991b.
[34] See also Ardeleanu-Jansen 1991, 2002.

conformity between town layouts (see e.g. Jansen 1979:96; Possehl 2002:248). Instead of solely lifting forward the idea of a dominating uniformity, the presence of variability is accentuated as well, not out of an either/or-model but as two complementing phenomena. Wright points for example both to the presence of uniformity and variability during the urban stage. A marked uniformity is to be seen in such things as the use of standardized weights, seals and written script, as well as in architectural features. As to the three urban centres of Mohenjo-daro, Harappa and Dholavira, all consisted of walled sectors connected by uniform sets of streets following cardinal points. All the centres had moreover some kind of two-part divisions, public amenities, divided neighbourhoods and extensive public works. Variability is however also present, such as in the nature and appearance of the public works, as well as in such things as house layouts (Wright 2010:23, 126f, 143).[35] Along with the critical re-considerations of various traditional statements concerning 'typical' Harappan features, a growing focus on diversity can furthermore be seen, such as the defining of different cultural traditions (e.g. Sonawane & Ajithprasad 1994). Especially emphasized today is for example the feature of mobility, and, with this, suggestions of a proliferation into various eco-zones, proposed as essential for the Harappan growth and geographical expansion (Sonawane & Ajithprasad 1994:129). The network system and its interconnection between the various settlements are also placed in focus (e.g. Jansen 2002:122).

Thoughts on social system and authority

The old way of thinking of the concept of the Indus Valley as something 'brought in from outside' is not supported today. Rather, the opinion is that it emerged as a result of a longer development that took place in the Indus Valley and neighbouring areas (Jansen 1993:123). A too biased comparison of the Harappan sphere with, for

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[35] In this connection, Wright accentuates among other things the unique building complex of the Great Bath in Mohenjo-daro, as well as the terraced reservoirs at Dholavira (Wright 2010:126).

instance, the Mesopotamian region is avoided. A number of scholars strive to comprehend the Indus Valley as a totally different social system that should be set in its own South Asian context (see e.g. Kenoyer 2004; Possehl 2002). Emphasis is also put on the greater, interconnected realm including the Indus Valley, Iran, Mesopotamia and parts of Central Asia (Ratnagar 2004; Wright 2010:20f). At the same time, essential parts of the social structure such as administration, political organisation or ideology remain elusive and in focal point for discussions. The reasons for this are among other things the undeciphered script and the absence of monumental or religious buildings.[36] With the rejection of the idea of a centralised, priest-controlled state governed by twin capitals[37], different suggestions have been presented as to the political constitution and unifying nature. Based among other things on the fact that larger buildings have not been found in clusters but spread out all over the town, Kenoyer suggests the possibility of a leadership divided between several clans or elite groups, with a unification of the cities through economic and religious networks rather than through warfare (Kenoyer 2000: 81ff, 91). The presence of uniform features is according to Wright "/…/sufficient to indicate an overarching set of ideas" (Wright 2010:143). The variability in public works, as well as in overall spatial planning, is on the other hand taken to point at the presence of localized authorities. In turn, this view objects to the idea of one authority residing over all the urban centres (Wright 2010:126f, 143). In this connection, Wright uses the term 'city-state' to emphasize the significance of the social, mutually dependent networks between the city and its rural communities. Harappan society, as she argues, was based on agriculture and animal husbandry at the same time as a large number of craft producers lived in the city. With this, Wright strives to avoid the centralized view of the city in favour of a focus on different social groups as well as on the integration of the city with the countryside. The 'city' is to be seen as a central place involved in the

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[36] Wright (1991:214f) suggests for example that the typical shifts in economic and social relations that are by evolutionists ascribed to state formations as a universal model appear invalid to the Harappan context, for which therefore a different kind of state configuration must be searched.

[37] For a review of objections towards the latter, see Jansen 2002.

handling of goods that exists in reciprocal exchange with surrounding towns and villages as well as, further away, with gateway settlements. Such ever-expanding networks thus cleared the way for the emergence of an urban infrastructure (Wright 2010:16ff, 142f).[38]

The Indus Valley is furthermore emphasized as characterized by a sophisticated craft technology. While monumental art is absent, there is a distinct focus on small-sized art (Clark 2003:304).[39] Wright points in this connection to the fact that a number of products were the result of the application of new kinds of methods. These involved such things as chemical processes or heat by which the materials were transformed. She lifts forward this 'transformative' stage as a way of thinking typical for the Indus society. This is also mirrored in the building of the cities, such as in the advanced engineering work (Wright 2010:20). It is thought that settlements may have been highly specialized in one or a few craft technologies, although the degree of this is a matter for discussion. The control of craft production and trade has been suggested as a promising key to gain better insight into the nature of administration and leadership. With analogies drawn from contemporary South Asian craft technology structures, complex systems of craft production have been put forward for the Indus realm, in which the control of production would have been essential for access to political power (e.g. Kenoyer 2000: 81ff).[40] As to 'elite' groups and markers of social status, Wright objects to the idea that social differences would have been 'masked'. She argues that

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[38] For more discussion on the terms 'city' and 'state', see Wright 2010:15ff. For a deepened insight into Wright's outline on the mutual dependency between the urban centre and its rural hinterland, see Wright 2010:Chapter 5, subsection 'City and Countryside'.

[39] Beads and figurines of faience, which was obtained by firing powdered quartz, appeared among the high-quality products. These also included beads of semiprecious stone like lapis lazuli or carnelian; microbeads of steatite; terracotta ornaments; bangles, ladles and other objects in shell; figurines and tools of copper and bronze; chert weights and long chert blades. Specific types of mostly wheel-made pottery include among other items large storage jars. Typical are for instance the Red Ware and Buff Ware, as well as black paint on red-slipped pottery (see e.g. Kenoyer 2000:41, 98, 139ff, 152; McIntosh 2002:63ff; Possehl 2002:122f; Ratnagar 2001:64, 67, 70ff; Sonawane & Ajithprasad 1994:134).

[40] See also Vidale & Balista 1988. For an illustrative example, particularly concerned with the shell working at the site of Nagwada, see Bhan & Gowda 2003.

differences were made apparent in the access to different kinds of buildings, to public amenities as well as to different kinds of artefacts (Wright 2010:234).[41]

Thoughts on trade and a 'greater, interconnected realm'

Trade and other forms of contacts is thought to have played a significant part for the emergence and maintenance of the Indus Valley complex, both on a regional- and interregional- as well as on a long-distance basis (Wright 2010:230f). From the middle of the third millennium BC, long-distance trade is considered to have been undertaken on sea-going ships to Mesopotamia, the Arabian Peninsula and beyond (Kenoyer 2000:91ff; McIntosh 2002:165f, 174f; Possehl 2002:218ff). [42] [43] Overland trade with groups in Central Asia and Iran seems at the same time to have remained of importance (Wright 2010:232). It is thought that a complicated communication network system may have knotted the vast area together. Jansen (2002) suggests that the Indus and the Ghaggar-Hakra river systems constituted a north-south settlement network in a centre-periphery pattern, with Mohenjo-daro as its administrative centre. This would among other things depend on the access the settlement had, via the river, to northern resource areas and to the sea in the south. Jansen thus proposes that its location would have been highly strategic when a supposed collapse of the inland trade route towards the west possibly may have lead to a shift to sea-borne trade (Jansen 2002:118ff).[44] [45]

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[41] In Mohenjo-daro, Wright points to House I in block 1 in the HR area as an example of a 'special' building (Wright 2010:253ff).

[42] For more on the control of trade, which according to Wright seems on the one hand to have been under official control, on the other hand to have been conducted by independent groups, see Wright 2010:232.

[43] For more on the Harappan trade and interaction in the context of a 'Middle Asian Interaction Sphere' as well as with a suggested two-level existence of patterns of interaction, see Ratnagar 2004; Possehl 1996, 1997.

[44] For more on the constituent elements suggested for the emergence of the settlement of Mohenjo-daro, see Jansen 1986:238.

Thoughts on ideology

The picture of a homogenous and ordered society underpinned by an ideology consisting of a Great Mother Goddess cult and a state-controlled cult with an overarching priest-king has in various ways been objected to today. With a focus on Indus imagery, Wright suggests for example an underlying theme on natural phenomena and the transformation of nature by humans, much like Indus artisans' appropriation of natural processes (Wright 2010:303ff). Jansen points to the exquisite water supply system as bordering on a 'luxury' consumption of water. At the same time, he suggests that this for its time unique access to water indicates a ritual significance, linked to practices resulting from "/…/people's mythical awe of the life-giving aspect of the element, rather than from an increasingly profane exploitation of water in the manner of later times/…/" (Jansen 1993:17).[46] A symbolic significance of water has also been suggested by Possehl as part of an Indus ideology that further distinguished itself by technology, urbanism and nihilism (Possehl 2002:55f, 250). Since different cult interpreted objects seem to have turned up in different areas, geographically parted and remarkably diversified beliefs have been accentuated (McIntosh 2002:107f, 124; Ratnagar 2002:70). Very few female figurines seem for example to have been recorded east of the Indus Valley (Ardeleanu-Jansen 2002:208).[47] Communication has further been accentuated as an essential aspect. Comparing with later traditions on the subcontinent, an ideology that may have been based on concepts of peace and order has in this connection been suggested (Kenoyer 2000:18ff, 81ff). Here, a particular, mobile character has been emphasized that may have

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[45] The importance of trade could according to Wright explain the emergence of 'far-away' located Indus settlements, outposts, such as Sutkagen-dor on the Makran coast, by which traders and merchants could take control over important routes, or Shortugai in Afghanistan, close to an important lapis lazuli source (Wright 2010:231).

[46] Besides the water supply system itself, these assumptions are among other things based on the presence of the Great Bath within the settlement, as well as on finds of terracotta animals in soakpits associated with house drainage systems (Jansen 1993:16f).

[47] A systemic approach advocating an ideology underpinned by a 'Great Mother' cult has however been put forward as well; see Atre 1987.

expressed itself in such things as ambulating narrators, and ritual performances not necessarily held inside structures but outside, perhaps under a sacred tree (Kenoyer 2000:111ff).[48] Clark opposes to earlier thoughts on sexual dualism to be seen in the Indus realm, as in later Hinduism. This is based on an investigation on Indus conceptions of sex, gender, and sexuality through the study of anthropomorphic terracotta figurines from the site of Harappa. As Clark argues, the dualistic thinking concerning sex and gender should here be avoided (Clark 2003). On the whole, the systems of thought still appear as very much elusive (Wright 2010:307).

Thoughts on 'the end'

Today, the idea of a sudden, dramatic 'downfall' of the Indus realm connected with such things as an Aryan invasion has been abandoned (McIntosh 2002:178f; Wright 2010:313).[49] As for Mohenjo-daro, the idea of devastating floods having caused its destruction is no longer advocated (Jansen 1986:56).[50] The period of decline has more recently been given more balanced considerations and/or multiple causes. Set into a larger context, this has among other things been considered in connection with changing trade routes and interrupted sea contacts (Jansen 2002:122; Ratnagar 2002:121ff). Indus urban settlements declined during the Post-urban/Late Harappan period (1900-1300 BC). The urban centres were abandoned and settlements shifted toward the Ghaggar plain and northwest India. The material culture became less homogenous (Wright 2010:23). However, scholars tend today to object to the uniform model of general decline (e.g. Wright 2010:320). Besides general causes to the decline, such as trade disruptions and

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[48] For more reasoning on the absence of temples and on ideas of non-place-focused rituals, see Ratnagar 2002:77f.

[49] For a similar objection to established ideas of an explicitly sudden emergence of the Classical Harappan cultural complex, with a particular focus on the case of Gujarat, see Ajithprasad 2002; Shinde 1998.

[50] Jansen suggests that the raising of the settlement through mudbrick substructures should rather be understood in connection with the yearly inundations of the Indus. This was a natural phenomenon before the building of dams started in the 1930s and, so, is not going in line with the picture of 'catastrophic' floods (Jansen 1986:56, 237f).

environmental shifts, Wright argues for the need to consider local causes as well, and to study each region specifically. Also, Wright maintains that changes such as these should not be taken as ultimate 'causes' to the decline. She finds it more fruitful to consider the various responses to the changes in the different regions. The general degradation of once structured city plans that can be seen in major Indus settlements, is by Wright suggested to reflect a breakdown of civic order, perhaps pointing at intentional rejections of the society and the leadership maintaining it (Wright 2010:309, 321ff). Possehl argues that what he terms as the transformation of the Indus civilization took place at its very ideological core, reflected in the disappearance of the symbolic meaning of water, the iconographic themes, as well as the use of advanced technology. The reason for this is suggested by Possehl to be found in a socio cultural system that was perhaps "too well adapted for its own good". It may have lacked something of a necessary 'inner conflict' and therefore an ability to negotiate successfully with the surrounding, constantly changing world (Possehl 2002:243f).

One of the long-lasting views set by earlier excavators is that Mohenjo-daro and Harappa represent a remarkably homogenous and monotonous, even 'boring' civilization (Possehl 2002:15, 248). This view is generally not advocated by Indus scholars today but still found in for example popular literature (e.g. Edens 1997). Still, and perhaps somewhat contradictory, going through the history of excavation, we come across different pictures or models attributed to Mohenjo-daro and the Bronze Age Indus Valley realm. Are we to see this as a more or less logic consequence – the urge to give a face to the faceless? So far, the research survey has shown us a number of angles of approach to Mohenjo-daro and its surroundings. Even though they differ from each other, they can be suggested to have that in common that they in different ways try to distinguish a settlement that is hard to 'fit' into a general model. Perhaps this is a reason why the settlement is so worthwhile to put into pictures? In popular culture, a marked alienation as concerns this settlement can be discerned, something which the different research perspectives can be said to oppose. That which is alien is on the one hand acknowledged and discussed in different ways. On the other hand, however, such

features can be said to successively become assimilated into the pictures and their different points of orientation. Surely, a too clearly expressed alienation would 'exotize'. Yet, such view could also prevent us from forcing something into a complete and totally closed model, making us realize that we are facing something Other; a settlement that – above all – demands our patience. This reasoning also opens up for the question how important it is for us to feel 'at home' in a settlement temporally and spatially separated from what is familiar to us.

3
A Lens on Games: research on game boards, game utensils and (board) games

[Virata] said to Kanka: "I cannot contain my joy. Come, let us play," and sat down to a game with Yudhishthira.
-Rajagopalachari, *Mahabharata* (2006/1951:213)

Another way of approaching the settlement Mohenjo-daro, which goes in line with the specific direction of this work, can be through a focus on games. In the previous research presentation, we started within the settlement and moved outwards, thereby touching upon different angles of approach as to what Mohenjo-daro and its wider context 'constitute'. By shifting the perspective, we may now start in the outer circle with the aim of successively moving back inwards again. With a number of game-related examples, we may in this way try to distinguish a game-related context for the part of Mohenjo-daro in both a geographical and a research-related sense.

3.1. On board game research

Board games have been studied from a number of different focal points, such as from the psychological (e.g. Gobet, et al. 2004), the philosophical (e.g. Reurich 1995), and the mathematical (e.g. Petković 1996) points of view. Concerning the Indian subcontinent, board games are also studied in connection with Sanskrit studies (e.g. Panduranga Bhatta 1995, 1999). According to de Voogt, research on board games can be broadly divided into two aspects: research aiming at learning about board games from different scholarly perspectives on the one hand and on the other hand, research that makes use of board games to promote various disciplines (de Voogt 1995a:1). In this short review, however, we will concentrate on some historical and archaeological studies on ancient game boards, game utensils and

(board) games.[51]

Leaving aside the research history on earlier works, one of the first publications constituting something of a synthesis of board games was the work of Thomas Hyde in the seventeenth century (Finkel 2007b:2). Taking a long step forward, the extensive work undertaken by the ethnologist and anthropologist Stewart Culin (1858-1929) must be mentioned. He was a curator in the Museum of Archaeology and Paleontology, University of Philadelphia, and in the Brooklyn Museum. His large amount of collected information on different kinds of games represents one of the classics in the field (Finkel 2007b:3; Freeman-Witthoft 2007:270; see e.g. Culin 1895, 1992/1907a). His collections included games from Europe and the Orient and from North American tribes. Together with Frank Hamilton Cushing his initial plan was to outline "/…/the skeleton of a world-wide panorama of gaming with evolutionary trees going back to common roots in Upper Palaeolithic times" (Freeman-Witthoft 2007:270).

Another classic work constitutes *A History of Board Games Other than Chess*, in which Harold James Ruthven Murray (1951) aimed at covering all the known board games of the world. These were ordered according to a uniform classification system. By doing this, Murray intended to produce a finer classification of games than the usual division between games of chance and games of skill, a division that according to him could be traced back to the ancient Greeks. The system was based on distinguishable differences seen in ways of playing, such as how gaming pieces or gamesmen were moved and how they were captured. This resulted in the establishment of five main types of games: (1) Games of alinement

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[51] The survey does not by far lay claim to be complete. For standpoints of today, examples will be principally taken from research of ancient games from the Indian subcontinent as well as from ancient Egypt and Mesopotamia, as these appear as most relevant for our geographical and temporal position. In a following part, we will have a look at some more or less well-known games from fairly contemporaneous cultural complexes in among other places ancient Egypt and Mesopotamia. These two parts are mainly based on three recently published, edited volumes on ancient game boards and (board) games (Finkel 2007a; Schädler 2007a; Topsfield 2006a). A concluding part concerns research and facts on game-related remains from the Bronze Age Indus Valley and from Mohenjo-daro.

and configuration (such as *Merels*); (2) War-games (like *Chess*); (3) Hunt-games (such as *Tiger and geese*); (4) Race-games (for example *Ludo*); and (5) *Mancala* games (Murray 1951:4f) (fig. 3.1. and fig. 3.2.). The system is well known in the world of board game studies. It has nevertheless been critically revised (see e.g. Bell 1979), as well as criticized for its inconsequence while sometimes referring to the outline of the board, sometimes to the type of game for which it is supposedly intended (see e.g. de Voogt 1995b).[52]

As to the Indian subcontinent, the mentioned work by Thomas Hyde from the seventeenth century included the first study done on Indian games (Topsfield 2006b:11). Ray and Ghosh (1999a) have collected 26 articles published in various periodicals by The Asiatic Society, Calcutta between the years 1790 and 1942, which deal with the study of Indian board games in different ways. Heinrich Lüders (1907) studied Indian dice games through Sanskrit sources, a work which since then has become a classic in this particular field (Falk 1986:73). There also exists a work on Ceylonese game-related materials written by H. Parker (1982/1909).



Fig. 3.1. An example of a war game in large format (photo by the author).

[52] This is all the more problematic since a particular board may be used for several kinds of games and since there is no way of knowing for certain what games may have been played on a specific board of ancient times. For this reason, it becomes essential to distinguish between 'game boards' and the 'board games' that may or may not have been played on such.



Fig. 3.2. An example of a race game (photo by R. Jönsson).

Recent research

The works mentioned above may perhaps seem impressive, but in general, the study of ancient board games has traditionally not received much attention from the scientific world. Board games, dice games and so forth have frequently been seen as banal, or meaningless, or even as something 'bad' (Schädler 2007b:7). As Finkel claims, and as concerns for example archaeological excavation reports, game utensils have often been lumped together with children's toys, "/…/with the implicit conclusion that they are all somehow 'childish', or at least the domain of children" (Finkel 2007b:1). If we concentrate specifically on the Indian subcontinent, research on games has according to Topsfield constituted a neglected field of study. Literature on the subject is patchy, and the field is "/…/still regarded as marginal by some" (Topsfield 2006b:11). According to Ray and Ghosh, with a few exceptions, "/…/Indian scholars have hardly taken any initiative to contribute to this field" (Ray & Ghosh 1999b). From 1990 onwards, the meagre picture has however begun to change little by little. In that year, a conference was held on the subject of ancient board games, which later has resulted in an anthology (Finkel 2007a), and which had the purpose of presenting new research on the subject. Since then, regular conferences named *Board Games in Academia* have been held and, in addition, a journal has emerged entitled *Board Games*

Studies (Finkel 2007b:1ff). As to the Indian subcontinent, an ongoing collaboration project must be mentioned between The British Museum and the Anthropological Survey of India, aiming at documenting traditional board games in rural India (Finkel 2007b:2).[53]

Researchers on ancient board games in general agree upon and build their research on the assumption that playing games is a significant part of human life (see e.g. Finkel 2007b:1; Schädler 2007b:7; Topsfield 2006b:12) (fig. 3.3.). As to the sub-fields of studies on ancient board games, the question of classification is according to Finkel still a subject of great concern (Finkel 2007b:3). Two further, established subjects in the field constitute questions on origin and transmission (see e.g. Digby [2006] on the origin and development of the Mughal game of *Ganj*; and Retschitzki [2007] on the origin and variations of *Mancala* games). In this connection, Finkel emphasizes the difficulties tracing games several centuries or millennia back. One reason for this is that games have the quality of travelling rather freely from culture to culture, another reason is that they generally have no 'inventors'. Natural items might also likewise have been used for playing games, such as boards being drawn on the ground, without leaving any traces (Finkel 2007b:1) (fig. 3.4.).



Fig. 3.3. An enjoyable afternoon (photo by the author).

[53] A further, recently published account that deserves to be pointed out is the extensive work by Hillbom (2005) on Minoan game boards and game utensils.



Fig. 3.4. Playing on a game board drawn on the ground (photo by the author).

Today, the research may also be said to have become more specialized, with scholars concentrating on a particular game or category of games (see e.g. Finkel [2002, 2006a, 2007d] on the Indian game of *Pachisi* or *Chaupar*; and Finkel [2006b] on Indian variants of *hunt games*). Of frequent interest is the understanding of how a particular game may have been played, such as seen in Kendall's (2007) account on the Egyptian game of *Mehen*, or in Hoerth (2007) concerning the Egyptian game of *Hounds and Jackals*. Reading through the accounts, we find on the one hand an interest in the ancient games from the perspective of playing for amusement and fun. From Finkel's view, while particular games may have had for example educational or military training purposes, we learn that "/…/it can still be argued that these have always been specific and localized offshoots of the original more lighthearted underlying function" (Finkel 2007b:2). One example is found with Piccione (2007), who in his account on the Egyptian game of *Senet* argues for a religious connection of the game at the same time as he lifts forward the secular, recreational side of the game, and the difficulty on the whole to distinguish between the two 'sides' (Piccione 2007:54, 62). Topsfield may on the other hand be suggested to express a somewhat different view, as he states that "[p]laying games of increasing complexity/…/served not only as a

diversion or pastime but as, in some sense, a mode of learning. At the most overt level, games themselves could mirror aspects of human life in an instructive way". This he exemplifies with the didactic origin of *Chess*, as well as with the religious symbolism of the game of *Gyan chaupar (Snakes and Ladders)* (Topsfield 2006b:12f). He maintains that although the playing of games for fun was always present, "/…/from early times, when gaming was associated with divination, such play also had a significant role in religious ritual/…/" (Topsfield 2006b:13). Dunn-Vaturi similarly states that ancient games was of immense importance "/…/not only for the profane entertainment, but also within the frame of initiation rites and divination techniques" (Dunn-Vaturi 2007:29, *my translation*). In line with this, we find a number of examples on accounts of ancient games within which a religious significance is emphasized. This we can see in Topsfield's own account concerning the meaning of the Jain and Hindu boards for the game *Gyan chaupar* (Topsfield 2006c). As to the finds of the game boards from the Royal Cemetery of Ur, Becker suggests that these should rather be seen in connection with divination practices (Becker 2007). Other examples include Pusch (2007) concerning the *Game of Twenty Squares*, Rothöhler (1999) on the religious connotation of Egyptian board games, and Soar (2006) on Indian sculpture depicting the dice game between Śiva and his consort Parvati. A number of accounts on ancient board games are furthermore concerned with games and game utensils played by and intended for the upper classes. This includes for example Finkel (2006a) on the Indian game of *Pachisi* as played at the Mughal court, Jaffer (2006) on richly decorated, Indian game furniture, and Vasantha (2006a, 2006b) on the collections of games of the Maharaja Krishnaraja Wodeyar of Mysore. One reason for this may be seen in the fact that richly adorned game boards and game utensils are in general more easily recognizable than more simply made examples (Dunn-Vaturi 2007:21). However, research on 'simpler' games can also be found, albeit of much less frequency, such as seen in Vasantha (2003), Fritz and Gibson (2007) and Rogersdotter (2010) concerning the engraved game boards at the site of Vijayanagara.

3.2. Gaming on the Indian subcontinent

According to Topsfield, during the last five thousand years, more variation and richness in the range of games and game utensils can probably be seen in the Indian subcontinent than anywhere else in the world (Topsfield 2006b:12). On the whole, play stands for an important concept permeating Hindu thinking (Topsfield 2006b:12).[54] The playing of games has constituted "/…/an essential part of both social and spiritual life in India from the earliest times" (Soar 2007:177). This is shown by a hymn in the *Rig Veda* (ca. 1100 BC or earlier), called the 'Gamester's Lament' (Topsfield 2006b:14). It can also be seen in other literary sources such as in the Mahabharata epic (about 400 BC-AD 400), in which a dice game becomes the cause of the great battle between the two related families the Kauravas and the Pandavas (Lüder 1907:7f; Soar 2007:177; see e.g. Rajagopalachari 2006/1951:104ff). Another well-known game-related scene is the dice game of the god Śiva and his consort Parvati depicted in the Puranas (Soar 2007:178). Literary sources show that gambling constituted an important feature in the Vedic culture in northwest India. *Vibhidaka* or *Vibhitaka* was the name for small brown nuts which were used as dice. These were later replaced by long dice (Topsfield 2006b:14).[55] A variety of race games were probably played on different kinds of boards, among them *ashtapada* boards (Topsfield 2006b:18), which, however, were probably only taken into use at a later stage (Panduranga Bhatta 1995:125).[56]

As to early historical, and archaeological evidence, dice dating from the early first millennium BC to the early centuries AD were mostly of the long type. They were flat or rectangular in shape, the latter with the four sides incised with one to four dots. Early historical dice (ca. 600-300 BC), made of ivory or bone, have been found at different sites on the Indian subcontinent, for example at the

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[54] Such as for example expressed in the principle of *maya* (Topsfield 2006b:12).

[55] Long or rectangular dice are still in use in India, and are usually known as *paśakas* (Soar 2007:footnote 3).

[56] As Panduranga Bhatta argues, no board games seem to have existed during the time of the *Vedas*, the *Ramayana*, the *Mahabharata* and the *Kalidasa* (Panduranga Bhatta 1995:132).

sites of Ujjain and Eran in upper Deccan, India, and the site of Taxila in Punjab, Pakistan (Ghosh 1990:178). Dice are furthermore reported to have been found at the settlement Sirkap at Taxila (second century BC-first century AD) (Marshall 1960/1918:80). Game boards incised on stone slabs in the form of series of rectangles derive from the Iksvaku levels (ca. 250-400 AD) at the site of Nagarjunakonda. Gamesmen from the early historical period were mostly made of ivory, bone or terracotta and were in the form of solid cylinders or shaped as circular discs with a raised boss surrounded by concentric circles in the centre. They have a widespread occurrence on the Indian subcontinent and have been found at sites such as Atranjikhera, Ujjain and Taxila (Ghosh 1990:179).

3.3. A Bronze Age realm of (board) games

Closing in on Mohenjo-daro, we need however to go further back in time. In the following, we may leave the Indian subcontinent for a while to look upon some traces of game boards and (board) games found at different places in for example ancient Egypt and Mesopotamia, places that are roughly contemporary with the settlement of Mohenjo-daro.

Neolithic mancala?

First of all, we may go even further back in time than the Bronze Age to mention the findings of what appears to be in total twelve game boards from the Neolithic, originating from five different sites in south-western Iran and the Levant (Simpson 2007). They are made of limestone or plaster and consist of two or more rows of hollows, of which at least the first type according to Simpson are very much alike boards used in *mancala* games. Following Townshend, *mancala* constitutes a "vast family of board games that spread at one time or another to most of black Africa, the Middle East, central southern and south-eastern Asia as far as the Mariana Islands and Philippines /…/". As Townshend states, they display a great diversity at the same time as they can be pinpointed as *mancala* by certain characteristics such as

being played in a formation of holes and with identical pieces (Townshend 2007:245).

Egypt

According to Kendall (2007), the study of board games of ancient Egypt starts in the tomb of Hesy-Re at North Saqqara from about 2620 BC. Here paintings of boards and pieces for three different board games have survived. The uppermost board, which is known as *Senet*, consists of a rectangular board of thirty squares, forming three rows of ten. Two sets of playing pieces and four rods that probably constitute two sided stick dice belong to this board. Finds of this kind of game board have been discovered on several occasions and the game seems to have been well-known throughout ancient Egypt (Kendall 2007:33). It was probably a race game as well as a game of strategy, and was played by all levels of society from at least about 3000 BC to the first century AD (Piccione 2007:54). The board in the middle of the painting is round and formed in the shape of a coiled snake. It is known as *Mehen*. The board seems to have had more than four hundred different compartments, marked out with lines. Six sets of six marbles in different colours show that the game apparently had six players. In addition, there are six pieces in the form of lions. Finds of this type of board belong to the early to mid-second millennium BC. It is thought by Kendall to have constituted a kind of race game, perhaps similar to a game played in modern time by Kababish nomads in Kordofan, the Sudan. The last board, at the bottom of the painting, is known as *Men*. It is of a rectangular shape and is divided by sixteen lines into sixteen compartments. The playing pieces seem to indicate two players. Very little is known about this game, but according to Kendall, the game may have transformed into the much more well-known game *Pegs and holes* during the early Middle Kingdom (Kendall 2007:33f, 43f). This last game is also known as the *58-hole game*, or *Hounds and Jackals*. The first name derives from the 58 holes which together form four rows; two outer and two inner ones. The latter name is taken from the two sets of five pegs found with a

board discovered by Howard Carter in Thebes, where one end is decorated with carved animal heads.[57] According to Hoerth (2007), it originated in Egypt about 2100 BC and thereafter spread into the Near East and as far as Iran. The youngest examples of the board are dated to the sixth century BC. While it was given different shapes and appearances, it still retained its basic playing surface, which, as Hoerth assumes, indicates that it was used for the same basic game; probably a kind of race game (Hoerth 2007:64ff). A further game found in Egypt is the *Game of Twenty Squares.* The board consists of 12 compartments that form three rows of four. From the middle row, a single row of eight compartments goes straight out. The board mostly appears as part of a game box. A *Senet* board can be seen on the other side. In association with one such box found in the tomb of Tutankhamun there were two sets of five pieces and two astragals[58], the latter for determining the moves. It apparently represented a race game, but due to its widespread distribution and long-lived appearance, Pusch (2007) argues that there was probably no homogeneity of rules for the game. Furthermore, as tomb-related furniture, it probably had a religious significance. It has traditionally been assumed to have originated in Mesopotamia (see below), and its appearance falls into the time bracket of the 26th and the 17th centuries BC (Pusch 2007:70ff, 84). Traditionally, this game has been associated with the name *Tjau*, which however according to Pusch represents a totally different game. Scenes of the game *Tjau* appear in two different wall paintings from the Late Period. It was played with marbles and, as Pusch suggests, belonged to the category of 'guessing games' – the aim was to guess the number of marbles that was dropped from one hand to the other. In light of the surprising absence of depictions of this game in earlier times, Pusch lifts forward the proposal that this game may share a common origin with the game of *Mehen*, although this constituted a race game in later times (Pusch

[57] No more examples of complete sets of gaming pieces have been found together with this game. As Dunn-Vaturi maintains, one of the reasons may be that the pegs were made of wood, another the misinterpretation of items like pegs made of ivory or metal as for example having constituted hair-pins (Dunn-Vaturi 2007:29).

[58] Astragals are the knucklebones from animals such as sheep or goats. Since they always fall onto one of their four different sides, they are suitable to use as dice (Schädler 2007c:10).

2007:69, 73ff, 82f). Also surviving from the ancient Egyptian context are numerous balls made in different materials, such as leather and straw, or wood or clay. Some of these objects, which according to Decker (1992) are found only in very early tombs, constitute the remains of a game that seems similar to *bowling*. Only in one tomb, a child's grave, a complete set was found. It consisted of pins, balls, and a gate made of stones, which the balls had to roll through. Two types of ball games can be distinguished from wall paintings, of which the first one includes different kinds of catching and juggling. The words *jmḏ* and *rwjt* may possibly constitute names for such games, of which the latter may perhaps have been a team game. The second type of ball games, of which there are two kinds, is to be seen as ritualistic. It includes a bat and resembles in its form modern polo, while its formal function was to protect the god Osiris or destroy the enemies of the gods (Decker 1992:111ff).

Iraq

In 1926, when Sir Leonard Woolley excavated at the Royal Cemetery of Ur, he discovered some richly decorated game boards inlaid with lapis lazuli and carnelian. The graves were dated to about 2600 BC (Finkel 1999:3; Dunn-Vaturi 2007:26). The type was named the *Royal Game of Ur*, but it is also called the *Game of Twenty Squares* (fig. 3.5.). It consists of one block forming three rows of four, one block of three rows of two, and two additional compartments bridging the two blocks. Two sets of seven pieces as well as dice were found in association with the game boards. The dice were either stick dice with four sides or in the shape of a tetrahedron.[59] [60] The board was in later times changed to the shape described above. That is, instead of the smaller block and the bridge, a single row of eight compartments

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[59] According to Finkel, dice formed in the shape of a tetrahedron are not found in later Mesopotamian contexts. As to the four-sided stick dice, these have not been found at any other Mesopotamian sites. The examples of dice found at Ur may therefore be taken to indicate an external origin (Finkel 2007b:17).

[60] Since the dice in the shape of a tetrahedron have two marked and two un-marked points and the stick dice bear lines on one side and circles on the other three sides, they fall into the category of two-sided dice (Schädler 2007c:9).

extended straight out from the middle of the larger block. More than one hundred examples of the board in this shape have been found dated to the second and first millennia BC; from Iran to Crete, and from Egypt to Turkey (Finkel 2007c:17). As to the way of playing on this later version of the board, Finkel suggests a detailed outline on the basis of what he interprets as game rules found on a cuneiform tablet of much later date. In short, it may have constituted a fairly complex race game for two players (Finkel 2007c:16-27).

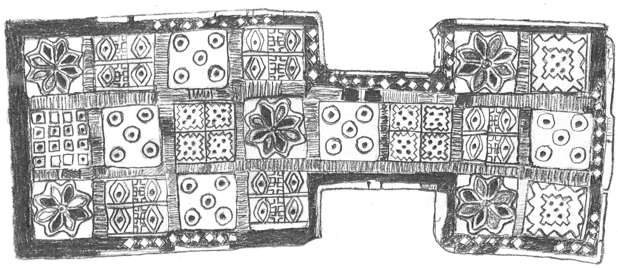


Fig. 3.5. The Royal Game of Ur (drawing by A. Jönsson, slightly modified, after Murray 1951:Fig. 8).

Iran

The finds of the boards from the *Royal Game of Ur* were later found to have a parallel in a carved wooden board found in a roughly contemporary tomb at the site of Shahr-i Sokhta, Seistan, in north-eastern Iran. The board is formed as a snake, the coiled body constituting the twenty squares. A basket with four long dice and 27 pieces in different forms was also found with the board (Finkel 1999:3f, 2007:17; Piperno & Salvatori 1982, 1983:178ff). Finds of game boards in the shape of eagles and scorpions have furthermore recently been made at the site of Jiroft in the region of Kerman. These belong to the third and second millennia BC. While the reptile surface shows a resemblance with the board from Shahr-i Sokhta, the outline of the board is the same as the later layout of the *Game of Twenty Squares* (with one block of compartments and an extended row of eight compartments). According to Dunn-Vaturi and Schädler (2006), the finds show a close connection between gaming and divination.

The Indus realm: notes on game-related materials

We have successively been moving eastwards and are now approaching the Indus Valley area. References to game-related materials of the Indus realm mainly include different kinds of dice and gamesmen, and a few meagre remains of game boards usually scratched in brick (Topsfield 2006b:14). Traditional excavation reports seem generally to include notes on game-related materials, which like other kinds of objects have been given fairly detailed descriptions. Reporting from his excavations at Harappa, Vats (1940a) includes for example a chapter that he calls *Playthings and Games*. Most of the chapter deals with children's playthings, while it is stated that "[o]bjects used for games are not many" (Vats 1940a:454). Among the objects that are listed with their own sub-headings are balls and marbles said to be mostly made of terracotta and found in plenty, and seven dice in the form of cubes made of stone, terracotta or faience.[61] [62] Numerous gamesmen of faience and given the shape of a tetrahedron were furthermore reported to have been found. Similar objects as the latter but made of unbaked clay are mentioned to have turned up in hundreds from inside a jar. They are rounded with a hole in each corner and they are therefore compared by Vats with those found for example at Ur. Comparisons are otherwise made with finds from Mohenjo-daro (Vats 1940a:455ff). Noted as possible gamesmen rather than pendants, Vats also mentions "/…/certain small tapering cylinders, usually made of hornblende, but sometimes of steatite and occasionally of lapis lazuli, which are grooved near the head/…/, and similar cylinders with plano-convex bead-like tops threaded and cemented on to them/…/" (Vats 1940a:454f).

Similarly but in less detail, in his publication of the Harappan site of Lothal, Rao (1985) includes a chapter that he calls *Gamesmen and Toys*. He mentions the findings of 75 terracotta gaming pieces, in which he includes the sub types 'zoomorphic figures', 'pellets', 'tetrahedrons', 'cones' and 'castles'. 'Gamesmen' in other materials than terracotta are mentioned separately. He also lists five

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[61] Of which one is mentioned to be marked in the same way as modern dice, with the opposite sides adding up to seven (Vats 1940:456).

[62] Cubic dice is an uncommon form in later times in India (Topsfield 2006b:14).

game boards in terracotta and mudbrick, a dice, and under the sub-heading 'miscellaneous objects' balls and marbles. The layout of one of the boards is described as consisting of concentric squares. One of the other boards consists of compartments making up the form of a rectangle. Besides short descriptions, some of the objects are compared with objects found in other, non-Harappan societal complexes (Rao 1985:502ff).[63]

Remains of game-related materials are also mentioned in more recent research. Kenoyer (2000) notes the presence of for example game boards carved on bricks and different kinds of dice. He relates to games both as ritual and as pastime: "[m]any carved objects from the Indus sites are made of valuable materials such as shell or ivory, and may have been used in ritual games or the pastimes of wealthy city dwellers" (Kenoyer 2000:120). Harappan-like dice and gamesmen found in Mesopotamian contexts have also been mentioned by Ratnagar (2004). These are seen as part of the range of merchandise showing the nature and width of exchanges occurring between different parts of western Asia and South Asia during the Bronze Age (Ratnagar 2004:200).

Game-related materials from Mohenjo-daro

Coming to Mohenjo-daro, we find similar mention of game-related materials as in the above reports. The two reports from the large-scale excavations at Mohenjo-daro both devote a detailed chapter each to *Games and Toys* (Mackay 1931c, 1938d).[64] [65] In the first report, Mackay states that /…/numbers of toys and gamesmen have been found"

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[63] Rao concludes that from the shapes and types of the gamesmen "/…/it appears a game similar to the modern chess/…/were popular with the Harappans" (Rao 1985:502). This proposal has however been criticized on several points in more recent times (oral com., Eder and the late Vasantha May 2008). For discussions as to the origin of chess, see e.g. Eder 1992; Linder 1994:14-55; Syed 2001.

[64] A much more detailed and comprehensive discussion concerning the game-related materials of the two excavation reports can be found in Chapter 5. In that chapter, the reader will also find a number of depictions of the objects.

[65] In the earlier report, game utensils are also shortly mentioned in a summarizing chapter (Marshall 1931e).

(Mackay 1931c:549). Among the listed, game-related objects of this report are cubical dice of pottery[66], round rattles of pottery, and balls and marbles of different materials such as shell and different kinds of stone. The comprehensive list further mentions gamesmen in different materials that are ranked according to popularity with faience, pottery and shell stated as the most common ones. Among the individually mentioned examples there are a variety of shapes and appearances, such as cones and items in the shape of a tetrahedron. The chapter also includes 'casting bones', which are made of ivory or bone and which according to Mackay bear similarities to long dice except that they have the same markings on all sides.[67] Here, a sub-variant in the form of a fish is mentioned as well. Besides describing in detail individual objects and the locations of these, the chapter includes various considerations as to wear, and as to the presence of objects according to the time periods. Comparisons are furthermore made with for example the ancient Egyptian and Mesopotamian contexts. The chapter also mentions the absence of knuckle-bones (Mackay 1931c:551-559). The chapter of the second report is similar to the first one but includes some more types of game-related objects. As well as cubical dice we find a list of tabular dice, which are reported to appear in two variants, one with a rectangular and one with a triangular cross section. There are also two game boards listed. They were both made in brick and both were reported as un-complete. The first one consists of four rows of shallow holes and a fifth row with square-formed hollows. The best-preserved row is said to contain fifteen holes. Mackay compares the layout with game boards used in Uganda.[68] The second board consists of lines making up a series of rectangles (fig. 3.6.). Given the original length of the now fragmented brick, the board was estimated to have consisted of three rows, each made up of four

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[66] They are said to be numbered in different ways but in no case as in modern dice, that is, the sum of the points of opposite sides amounting to seven (Mackay 1931c:551f).

[67] Finds of the same type of objects made at Harappa are interpreted by Vats as balusters, which he thinks may have belonged to for example small caskets (Vats 1940b:460).

[68] At the Mohenjo-daro site museum, the present author noted a second brick that in a similar way had rows with small holes. The exact location of where this brick was found is however unknown.

compartments. One of the compartments has a cross of scored, diagonal lines. According to Mackay, since the brick possibly formed part of a pavement, the board may have extended to the bricks on either side.



Fig. 3.6. One of the two fragmented 'game boards' from Mohenjo-daro, made up of lines (from Mackay 1938a:Plate CXLII.82).

In light of the, then, newly discovered finds by Sir Leonard Woolley at Ur, the board is compared among other things with the *Royal Game of Ur*. The chapter also includes a much more detailed account on gamesmen, including a table at the end giving information concerning for example materials, measurements and location of finds. The gamesmen are presented according to various sub-types, of which the most common are said to be 'cones with incurved sides'. Among the others are for example 'round topped cones', 'straight-sided cones with definite head', as well as 'regular tetrahedra'. The 'casting bones' of the former chapter are here presented as 'casting sticks', and as well as 'fish', other sub-types have been included as well (Mackay 1938d:558-578).

Besides listing game-related materials in excavation reports, studies concerning these objects are scarce. One exception is the cubical dice from Mohenjo-daro that appear in the article *Of Dice and Men* by Dales (1968). Here, finds of cubical dice from the Bronze Age Indus Valley sites of Mohenjo-daro, Harappa, Alamgirpur and Lothal are accounted for in connection with a re-investigation of the possibilities and nature of contacts between the Indus realm and Mesopotamia. The dice are compared with the few cubical dice that are found in Mesopotamia. As to the difficulties in understanding these contacts and their impacts, Dales concludes that the

"/…/continued discovery of such mundane objects as dice and figurines alone can provide the material verification for such inquiries" (Dales 1968:23). Ivory sticks from Mohenjo-daro bearing inscriptions, have in more recent times been included in the work by Franke-Vogt (1991a) on the iconography of the seals, seal impressions and tablets from Mohenjo-daro. With Finkel (1999), one of the two game boards from Mohenjo-daro has been set into a larger, and explicitly game-related, context. Finkel suggests that the fragmentary game board consisting of series of rectangles would perhaps have been of the same family of board layout as the more famous game boards from Ur and Shahr-i Sokhta. Since the types of dice that were found with the boards from Ur, tetrahedra and stick dice, were uncommon in a Mesopotamian context, he proposes a possible route for this board game from the East, via Iran, to Ur. This should have happened sometime in the later part of the fourth millennium BC or in the beginning of the third millennium BC (Finkel 1999:4f).

What we accordingly have touched upon has not been of the grandiose kind. It has not revealed any 'great' civilizations. The picture has successively shrunk as we have moved back to Mohenjo-daro, but it has also shrunk in the sense that what we now see, is of the small format. The angle of approach concerns something that on the one hand can be seen as ordinary and insignificant. On the other hand, it can be said to be about some of the commonest things in the daily life of the human being.

4
Grounding Archaeology, Avoiding Absoluteness
– the development of method –

Das Leben kann eben nur durch das Leben verstanden werden, und es legt sich dazu in Schichten auseinander, von denen die eine das Verständnis der anderen vermittelt und die in ihrem Aufeinander-Angewiesensein seine Einheit verkünden.
-Simmel, *Vom Wesen des historischen Verstehens* (1999/1918:178)

This chapter aims to reach an archaeological way of working within which find materials do not necessarily need to be regarded as fragmented, incomplete parts of an all-embracing Something. An approach is worked towards where the materials, despite their fragmented appearance, can be presented as both adequate and complete unities in themselves. In order to reach that point, the chapter starts with a view on methodological aspects relating to studies of (pre)history in general, as well as to conventional archaeological practice. With this reasoning, questions of ontological and epistemological character will be touched upon. This will begin with a discussion based on source critical aspects. Three such aspects will be mentioned. The first is historical source criticism; the consideration of both more general as well as more concrete, source critical aspects when reading written sources. The second and third aspects concern archaeological source criticism from the points of view of reflexive archaeology as well as formation processes. Thereafter the discussion will be deepened with among others Gero and Bourdieu, as well as with a contribution by Simmel concerning an alternative way of understanding our past. The lines of thought lead us towards 'grounded theory', as well as the suggestion of a modified form of this as a way of reaching our goal. The modifications build on reasoning borrowed from Bateson, Gero, Simmel and Hall. The chapter ends in the formulation of an alternative, archaeologically suitable method that will be applied in this work.

How would explicitly source-critical reflections add something of value to a practice that can be said to have such aspects, so to

say, inbuilt in its very structure? And why would anybody explicitly vote for the use of grounded theory and its demand for a grounding of theory in empirical data, when it comes to archaeology? Would such a demand indeed be necessary for investigations that generally use concrete, material evidence as their point of departure? Concerning source-critical reflections, these may *because* of the evident, sometimes overwhelming, presence of doubtful, incomplete and poorly preserved evidence add unexpected dimensions to the archaeologist's everyday work. A way of emphasizing a vote for grounded theory, on the other hand, could be to question in which way, and to which degree, archaeological material is indeed treated as empirical data. Another way of answering could be by referring to the intimate, but seldom spoken of, relationship between archaeological research practices and the own self, the 'I'.

4.1. The Past/Pasts? – the application of source-critical aspects

The reading of written sources in the light of historical source criticism

Older, published and unpublished, written sources, originating from the large-scale excavations of Mohenjo-daro in the 1920s and 1930s, constitute the main sources for this study. The reading of these spurs a source-critical line of thought by which a problematized relation between archaeology and its past is presented.

A general, source-critical aspect concerns the distinguishing between *remains* and *narrative sources*. According to Alvesson and Sköldberg (2005), remains represent sources of non-intentional content or non-subjective distortion: the sign of an event. Narrative sources contain in contrast intentional information. Having passed a 'subjective medium', they represent the expression of an event. However, in most cases, the material in question may constitute both a remain and a narrative source (Alvesson & Sköldberg 2005:124). Besides this rather abstract concept, there are a number of source critical angles of more concrete character. One such example is constituted by the four criteria set up by Thurén (2003:11):

- *authenticity* (concerns the question whether the source is what it claims to be)
- *connection of time* (concerns the space of time between incident and taking down of notes; the longer the distance, the lower the credibility of the source)
- *independence* (concerns how free-standing the source is; it should not be an account of another source)
- *non-tendentiousness* (concerns how the source pictures reality; suspicion of falseness due to someone's personal, say political or economic, interests should not be existent)

Focusing on the written sources of this work, an awareness is naturally needed of their quality as *narrative sources*. They are shaped within certain contexts of preferences and intentions and written by authors having their own, personal reasons and ways of comprehending things. They must continuously be exposed to key questions such as those formulated by Thurén with the 'ideal' points. How free-standing can the text supposedly be? During which phase of the excavation may it have been written? And so forth. However, at the same time the same sources can be lifted forward as *remains*, since they provide information concerning artefacts and structures that are to a large part lost today. Here, we stumble upon a point that can be said to concern time. As shown above, Thurén emphasizes among other things the space of time that has elapsed between the incident and the taking down of notes (expressed in the point 'connection of time'). Operating as remains, the sources can either be said to appear closely situated to the incident in question (whereby they, following Thurén, should indicate a considerable degree of credibility), or, in contrast, immensely far from the incident. It all depends on where to situate the incident: in the distant Bronze Age, when the incidents took place that lead to the leaving behind of the objects; or in the 1920s and 1930s, when the same objects came back into sight? Questions such as these may above all be useful for illuminating the tripartite research position that is of interest here. The researcher searches for a distant past, through written sources of another, much more recent past, which, in the end, gives more than one past to handle. The delicacy of this position can be more clearly illustrated by the

formulation of Aaslestad (1997) of the *instability of the role of the reader*. Seen from a literary scientific point of view, this refers to the problem of bringing your own frames of understanding into the object of study. Aaslestad argues that while reading historical documents, you successively begin to inter-mix the text with your own awakened feelings, making the text ambiguous and the role of the reader many-facetted. Gradually, your curiosity and distance to the text is thereby lost, so that you both linguistically and comprehensively come to share the jargon of the past. Adopting the text's own logic, you successively turn from being a text-receiver to a text-producer. By then, your quota of understanding is so filled up that the information of your object of study appears as perfectly obvious (Aaslestad 1997:32). The written sources of the kind mentioned here may be apprehended as a more or less outspoken hindrance on our direct route back to our particular, prehistoric situation. We 'know' all too well why the authors wrote as they did, or what the preferences of their contemporary contexts looked like. Shaking off the contemporary-marked parts of their interpretations may appear as a well-known, perhaps even irritating problem to us. However, if we at the same time fail to make the number of pasts covered by our research clear to ourselves – that is, accepting the presence of the past in-between – it appears doubtful whether we are indeed capable of keeping that necessary, with curiosity impregnated, distance to our sources. We seem, with Aaslestad's argument, to risk ending up becoming the producers of our own readings. Handling a markedly distant past, such as is the case in this work, the past in-between is moreover probably liable to become amalgamated into the present. How, then, can we in this situation accept this past in-between in a more tangible way? One way may, as a suggestion, be through a listening or reflective way of working by analytically acknowledging our pasts as separate unities that are composed of unique qualities and have their own, individual demands as well as shortcomings.

Reflexive archaeology – archaeological source-criticism

The impossibility of avoiding to set one's own imprints on the field work has been accentuated by numbers of scholars from disciplines

such as anthropology, ethnology, and history (e.g. Clifford 1986; Geertz 1988; Snellman 2001). Lines of thought such as these can be described as *reflexive* attitudes. The concept has been used differently within different disciplines and therefore received a variety of implications. According to Berggren (2002), the concept has in more recent times constituted part of a greater trend within archaeological research. Within this, an overall questioning of deep-rooted categorizations can be found, as well as a striving for interdisciplinary interpretations and reflections concerning the researcher's own role within processes of interpretation. One of the today perhaps most well-known, explicit attempts of a reflexive way of working may be the formalized methods developed by Hodder (2000a). With these methods, Hodder aims at a systematized integration of the concept of reflexivity within practical archaeological work. The endeavour is meant to accentuate the use of multi-perspectives and to bridge the gap between archaeology and the public. In order to reach these goals, the methods include such things as smaller working teams, interdisciplinary cooperation, timetabled meetings between field- and laboratory staff for greater integration and diaries especially designed for reflection and documentation of the process of knowledge production (Hodder 2000a). Built on a principle of a non-dichotomous thinking, Hodder aims with his formalized methods among other things at an alternative conception of the term field. He maintains that the traditional utilization of this concept has come to define a distant 'away', in turn supporting a decontextualised view and a general formation of opposites such as objective/subjective, general/regional, we/the Others. According to him, it represents a hegemonic and colonial perspective that has strengthened a distinction between a descriptive collection of materials and a later, interpretative taking down of notes. It has also contributed to the idea of a far away situated past, possible to reproduce in an objective way at a safe distance – that is, when back 'home' from the field. He suggests a way to overcome the problematic conception of the distanced field in a differentiation of field and site. Here, the former is apprehended as referring to all kinds of stakeholder groups of the latter. The field, extending within networks of interaction, can with this view be perceived as including the 'home' as well (Hodder 2000b:17f). Coming this far, we could use the conception of a multiplied field to avoid the

assumption that we are dealing with one, single past. However, we could on the other hand also raise some scepticism towards the 'taking home of the field' such as advocated by Hodder. According to Geertz, in traditional scientific thinking, the assumption prevails that an exposed account of how an ethnographical field work actually has been undertaken, is the same as to suggest that the work has not been done at all (Geertz 1988:2). That is, we could see a reason for why the past in-between is perhaps not being especially emphasized, in that it actually constitutes part of the working procedure. While 'taking home the field', however, we seem to reach an exposure that tends to rest on the familiarization of the field. We work to bridge the gap between ourselves and differently distanced pasts, when, in reality, what we are doing is denying these distances in the sense that the pasts are actually deprived of their strange or contradictious components. With the words of Aaslestad, we would once again, and against our intention, become the producers of our texts.

Formation processes – archaeological source-criticism

Another source-critical field within archaeological research is formation processes. Much has been said about this subject, and we will here briefly touch on two representative statements. A tripartite research position of a wider kind can be seen in the emphasis by Kristiansen (e.g. 1985) of the necessity to consider post-depositional formation processes when undertaking archaeological research. Within this broad field, Kristiansen distinguishes historical source-criticism as part of one of three major aspects of a general character that must be taken into consideration when establishing the representativity of a given data. They concern the consideration for physical and environmental factors[69], cultural and economic factors as

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[69] This can in turn be seen as a critical field of its own, in more recent times defined with the term environmental archaeology. This includes the studying of such things as sediments and soils as to structure, texture, microstructure, kinds of bioturbation and similar aspects, as well as the effects of pedogenesis and diagenesis. Besides providing insights into human-environmental, mutual influences, such studies may also yield different perspectives. Environmental factors and residues of human

well as factors related to previous research and registration (in certain cases the latter includes the need for historical source criticism) (Kristiansen 1985:7f). With such an approach, we see that possible pasts in-between become inbuilt in the structure of thinking as one of several factors to adhere to. Proceeding into more detail, we may lift forward the accentuation by Seymour and Schiffer (1987) of the crucial need to consider assemblage variability from the perspective of formation processes. This opposes what they claim as a traditional and simplified assumption in archaeology, namely that variations in material remains should directly mirror past behaviour- and organisational patterns. Although the undertaking becomes much more complex, this is nevertheless stressed as a prerequisite before proceeding to examine possible, organisational and behavioural indices. This is particularly the case when analyzing house assemblages with the aim to distinguish activity areas and house function within a particular settlement (Seymour & Schiffer 1987:550ff, 576). Structures are in this way getting the function of "/.../receptacles in which artifacts resulting from activities performed by residents may have been deposited" (Seymour & Schiffer 1987:594). Material remains within a structure become part of a 'systemic context'. The variability of such a context is according to Seymour and Schiffer due to a number of factors of a prolonged character.[70] In accordance with this, they stress the need to examine and sub-group material remains as to whether they may represent *primary-*, *secondary-*, or *de facto* refuse, including among other sub-distinctions provisional refuse and abandonment stage refuse (Seymour & Schiffer 1987:550ff). With this undertaking, our past may be suggested to become further problematized while appearing in the

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activities can for example be perceived of as more intermixed and thus not possible to approach as isolated entities (Dincauze 2000).

[70] These include the tendency of storing objects that are not in active use anymore inside houses; the commonly rather gradual as well as planned abandonment of a structure, by which various processes of depletion account for which items actually will be left behind; the scavenging of already abandoned structures, or the use of these as a secondary refuse area; the reoccupation of structures and the incorporation of previously deposited materials into new buildings; and the movements of abandoned remains by natural causes, such as by decay, structural collapse, or erosion (Seymour & Schiffer 1987:550ff).

form of what we may call different sub-pasts.

In light of the number of factors of uncertainty prevailing within archaeological research, ranging from textual considerations to physical and environmental factors, the explicit utterance of the concept source-criticism may perhaps sound superfluous. Since more or less incomplete and inadequate remains constitute the foundation of the discipline, it could be suggested that a kind of constantly present, and therefore unspoken, source-critical dimension ought to be inbuilt into its structure. This paradox, the unspoken character of this dimension, constitutes the subject in the article by Gero that was touched upon in Chapter one. Her argument is that uncertain or ambiguous aspects to a great extent have become almost invisible within the archaeological discipline exactly *because* of their overwhelming presence (Gero 2007). As we recall, the archaeologist manages to keep out ambiguous aspects from his or her investigation by using specific 'mechanisms of closure'. The aim of this is to reach what appears as *certain* conclusions. In a discipline surrounded by so much uncertainty, the criticism by Gero of efforts in forwarding certainty may perhaps seem a bit odd. However, Gero maintains that this must be understood from the opposite point of view: due to the significant degree of uncertainty, archaeology has come to value high, even over-value, unambiguous facts (Gero 2007:312f). As a reaction against different factors of ambiguity, a general adoption of procedures or mechanisms with the aim of by-passing such problems can according to Gero be seen permeating archaeological practice. This occurs on a regular basis with the hope of presenting the academic world with as much 'certain' knowledge as possible. The production of unambiguous facts has accordingly become one of the main, organizing objectives of today's discipline. It partly defines the policy and practice of the discipline, as well as plays a significant role in grant expectations and publication possibilities (Gero 2007:312ff, 317ff). With this, we see that our considerations regarding the number of pasts to handle must include yet a further dimension as well, namely, the existence and influence of the past(s) in the *present*. How much influence does this present past have on our discovery of the past and to which degree are we aware of its existence? Emphasizing

the ontological and epistemological depth of such inquiries, we could formulate this issue as 'how do we understand our understanding of the past?'.

4.2. The Past – a pavement for the present?

On a past that *is*

Studying the production of history, Zander (2001) states that history functions at three different levels: as *fact*, as *interpretation*, and as a *phenomenon of consciousness*. History as *fact* is compared with a larder, from which a particular knowledge may be picked out that is momentarily satisfying. The level represents one of the discipline's most original aims: to find out 'how it actually was like'. History as *interpretation* appears on a twofold level. Interpreting history may on the one hand constitute the relating of new facts to established historical knowledge. On the other hand, new facts may become part of a distinct, historical situation that is given a definite beginning and a definite end. That is, history becomes a process that is not necessarily leading into the present but is frequently used so as to mark a chronological distance between the present and the past. History as *consciousness* in contrast underlines the aspect of utility. It excludes events or individuals from the past that are not considered to fulfill any function in the present. Needs and interests of the present decide the interpretation of the past. History becomes a path of continuity from the past to the present that appears predestined and meaningful and therefore furthers a feeling of safety. Therefore, as Zander concludes, history as consciousness in general holds a particular power of attraction (Zander 2001:39ff). In light of this analytical distinction, the un-tenability of viewing a distant Bronze Age and the present as un-related poles becomes obvious. Lacking this tripartite insight, however, such questions as why one chooses these channels of interpretation instead of those can easily be escaped. An effort can also be maintained to keep the research 'safely back in the past' for the overarching purpose of avoiding to get involved in present matters. It is even possible to let the inquiries go in line with the traditional goal of finding out 'how it actually was like'. Following

Gero, we can see that such inquiries tend recurrently to be allowed in archaeology. According to her, the construction of unambiguous facts in archaeology, aimed at certainty, follows along a line of thought oriented towards status quo. The firmer – the more determined we are when we draw our conclusions – the more trustworthy will we appear in front of the academic and archaeological public. We thus see a straight, one-sided direction towards far-reaching conclusions of a final and 'right' character. Starting from unambiguous facts, these must necessarily lead into similarly unambiguous reconstructions of past social structures. Imposing meaning on the past human beings of our study, we make them uniform and disciplinary in nature. We arrive at 'flat' time- and space reconstructions: we conflate something into an outstretched, descriptive moment that has little to do with the fluidity and continuity of life in reality. In this way, we can assume static, simultaneous behaviours, like occupation or utilization of houses and activity areas, over lengths of time (Gero 2007:312f, 319). We accordingly seem to arrive at people and situations of the past characterized by an endless 'are', where designations such as ethnical group, class, or culture can not only serve to form closed concepts, but also infinite such.[71] [72] [73] Ultimately, we can reach a past that is clearly removed from and thus seemingly not influenced by the present. Here, we clearly maintain a distance. But this is a distance conditioned by the defining of one, single past, appearing as a complete and closed

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[71] For a summarizing view on a more theoretically grounded concept of space as a way of avoiding the 'eternal' character of the social units in archaeology, see Cornell 2007.

[72] A similar objection to research questions that can be said to be formulated by the verb 'to be' can be found with Eriksen (2003/1993). With his concept ethnic revitalization, Eriksen argues that ethnicity needs not to stem from some kind of 'original' cultural differences. With this, he puts forward the un-tenability in questions such as 'what are these people *really* like?' (Eriksen 2003/1993:108ff).

[73] We may also see the traditional notion of 'objects' as constituting the opposite of 'people' in this light. According to Riggins, this distinction mirrors the division between what is considered as objective, that is, of a universal character; and what in contrast is held to be subjective, such as attitudes representing relativity and changeability. In this way, we get at a 'material stability' that can guarantee a particular degree of invariability to the objects (Riggins 1994:1). The remains then seem, despite or amidst an omnipresent ambiguity, to function as some sort of guarantors for certainty and safety.

set, within which every find with necessity must constitute part of an all-embracing Something.

Why, then, do we demand from ourselves and others the attainment of such flat absoluteness? With the past as a distanced, opposing pole to the present, one way of answering could be with the idea of the two systems of opposition outlined by Bourdieu (1990). According to this line of thought, what stands 'in opposition to' can in itself be divided into oppositions that stand in a relation of homology to the first opposition. This principle guarantees "/…/a surplus of consistency, without involving confusion between [the two] areas" (Bourdieu 1990:277). The structure becomes powerful in that it both counterposes and unites, whereby an endless number of data can be integrated into one, single order (Bourdieu 1990:276ff). An intrusion of any kind into this micro-world, such as the observance of ambiguities, would with this point of view disturb the wholeness of this world and, consequently, appear as a threat towards the whole structure.[74] The question can also be formulated as *how* do we understand this compressed, timeless understanding of ours in regard to the past? When starting from this kind of inquiry, it is according to Simmel not sufficient to halt at the existence of ambiguities or inadequacies of source materials. In his essay on the essence of historical understanding, Simmel (1999/1918) puts forward the importance to *understand our understanding of the past*, whereby we clearly can see what we in this case are actually *misunderstanding*.

The misunderstanding of understanding

The impossibility of developing historical understanding is according to Simmel intimately linked to our general misunderstanding of the act of understanding (Simmel 1999/1918). He takes his starting point in the seemingly evident fact that one, in order to understand another individual, needs to ascribe this individual the content of one's own psyche. This is because the individual in question does not actually

[74] Following Derrida, it could however also be stated that the thought of Being in terms of a *presence* is in accordance with the structural thinking in line with a 'centre' (Derrida 1993/1978:279f).

seem to constitute anything else than a cluster of outer impressions, behind which one considers oneself able to foretell (but cannot know for sure) the carrying on of the individual's 'soul'. In order to reach some understanding, one must accordingly transmit one's own experiences onto the other person; animate him or her. This in turn presupposes an essential similarity between the own I and the other person (Simmel 1999/1918:154f). It is at this point that we find and define the main problem of historical understanding and likewise the cause to our misunderstanding. According to Simmel, this conception of ours can be deduced from our mechanistic way of seeing things and the atomizing idea of this; of the splitting of the human being into body and soul, into a physical exterior and – transmitted through intellectual activity – a psychical interior. With the idea of the psychical interior as a kind of secret room, detached from and lying behind the individual's visible 'outer', it follows that this view cannot cope with comprising the living as a wholeness, as a unity. We find ourselves compelled to cleave, in order to, thereafter,

"/.../re-build a bridge between these parts to gradually patch up the unit we had from the beginning. We assign the body completely to the optical sense and entrust in the same way the psyche to our own psyche. We, thereafter, let this psyche step into this body, through its being ascribed to, transmitted, projected or what else one wants to call this never provable activity. But this dividing up implies that the atomizing way of thinking is committing an assault" (Simmel 1999/1918:161, *my translation*).

The deeply rooted character of this way of thinking depends according to Simmel on the belief in *realism*, and the idea of taking in things into our knowing 'as they really are'. Only the things that are self-experienced are considered to possess full reality. The only way of knowing what is going on within the other individual's psyche therefore seems to be to picture the experience of this psyche as being identical with the own experience. We identify an outer phenomenon, and transfer it to this other psyche. In order to make such a transfer of the own experience possible, however, we must already know beforehand which one of our own experiences that could be of use. The impression we get of the other individual's experience through this theory of projection must, hence, be foresighted beforehand. This means in other words that the ultimate goal for all kinds of relations

can only consist of a dissolution into similarities. (Historical) understanding thus becomes synonymous with the attaining of similarity between the subject and the object (Simmel 1999/1918:159f). The reason that these kinds of procedures can be perceived as functional depends on the belief in realism. Within realism even historical understanding can be conceived as communicating a copy of what "/.../has occurred, *'in the way it really was'/…/"* (Simmel 1999/1918:179, *my translation, my italics*). Realism, that so to say works as the mainstay in this connection, is however not particularly maintainable. According to Watier, Simmel points in this connection to what he formulates as the essential dilemma of sociology. This is the overlooked fact that when reality, through its language and its created categories, receives the status of knowledge, it follows that knowledge can never constitute a mirror-image. Rather, it must always be perceived of as a *secondary construction* (Watier 2008:94). In line with this, it becomes untenable to assume that a direct similarity between the subject and the object – or between outer perception and inner experience, followed by a direct transfer of the latter onto the object – would be sufficient for an understanding of a historical individual (Simmel 1999/1918:158ff).[75]

A twofold way of understanding

Opposing this reasoning, Simmel presents a view that he calls the *vital* or *organic* way of understanding (Simmel 1999/1918:179). This can be said throughout to consist of a twofold structure. This structure is however not to be understood as the primary splitting of the mechanistic point of view. Rather, it is of a *secondary* or an *analytical* nature. First and foremost, as Simmel accentuates, *history* and the *past* must be regarded as two different things. The latter always appears

[75] One of the arguments speaking against the idea that transference automatically would lead to understanding, is for example found in the lack of understanding we recurrently experience concerning our own past. Such lack of understanding would, as Simmel asserts, evidently not be existent, would understanding solely be dependent on and evoked by one's own, psychical experiences (Simmel 1999/1918:158).

prior to history in the form of discontinuous, non-formed elements. The former, without providing any new content, appears as a kind of functional relation, a series. This is established through an inner way of thinking, described by Simmel as a contemplating, synthesizing mind that penetrates and in this way usurps the materials in question. Secondly, the ability to historical understanding is conditioned by our general knowledge of how a human being understands another human being. This point, the fundamental relation between two psyches, is in turn connected to the first point, since the course of life always rests on a consciousness about the past. This past is however not constituted by the just mentioned, discontinuous chaos, but by an already analyzed and interpreted material that has been conceptually sorted into a psychologically meaningful structure. That is, sorted into 'history'.[76] The decisive point thus concerns a constantly ongoing process of exchange, within which a synthesis occurs of two originally separated elements. The element of understandable thinking is added to a real, not yet understood phenomenon. This element is worked upon by and springing from the subject and is usually not consciously perceived. By penetrating the phenomenon, this element becomes raised to consciousness through its effect; the by now understood phenomenon (Simmel 1999/1918:153f, 165, 177ff).

To understand the process of understanding in this way means among other things to be able to perceive it as parted into two different forms of understanding: the *non-historical* or *objective* (the understanding of a poem, for example, in regard to its content and poetical meaning) and the *historical* form (the understanding of the same poem in regard to, say, its author's phase in his/her authorship) (Simmel 1999/1918:166f). The basis for distinguishing between these forms is, as Simmel accentuates, difficult for us with our way of understanding knowledge to grasp. When it comes to understanding 'spiritually objective' products, there may namely exist a number of answers or solutions that may all be equally correct, besides the viewpoint that the originator of the product had in mind. After having been created, an object can namely be said to become *liberated* from its

[76] In this way, everyone comes to be the historians of their own lives, at the same time as everyone in the role of historian fulfils the pro-scientific life's way of providing form (Simmel 1999/1918:153f).

creator. The work is made independent and acquires with this another content than the one intended by its creator (Simmel 1999/1918:167f). In everything that we create, as Simmel maintains, there exists yet another meaning, which goes beyond our own intention or capability. In contrast, the historical understanding of the same object (that is, the process of creating it) cannot comprise a corresponding ambiguity, since the process can only occur in one, single way and can therefore only be totally true or totally false. Thus, complete *historical* understanding of a particular phenomenon can be achieved. An *objective* understanding of the same phenomenon – an understanding that embraces the totality of significances being enclosed in the phenomenon – can in contrast never be completely satisfied. However, as Simmel concludes, the paradox appears when historical understanding implies psychological understanding. In that case, facing a variety of perhaps contradictory 'solutions', the understanding in question can never reach completeness (Simmel 1999/1918:168ff).

Past as power

While we as archaeologists do recognize the fact that we can never reach completeness, our ignorance as to the above, alternative line of thought makes us believe that this circumstance constitutes a problem that has to be solved – by a number of negotiable methods and 'mechanisms of closure', to use the terminology of Gero. The mentioned neglect within archaeology of acknowledging ambiguities can accordingly be seen as following from the established, mechanistic point of view, in which completeness with necessity must constitute the goal. The neglect can in other words be seen as an effect of the fact that we understand understanding of a particular past as entirely historical in nature. Our procedure can thus only lead to one, supreme mode of interpretation. In this connection, Gero accentuates the close relation between archaeology's striving for unambiguous facts and issues of power and authority. Besides constituting an outcome of the mechanistic way of thinking, we distinguish an active support for this line of thought as well:

"In archaeology, the strategies that bolster, protect and reward *certitude* reflexively feed into and feed from a wider sociopolitical world where hierarchical authority is asserted by the able and the powerful; where certitude, action, determination and leadership are honored as a package of traits that make democracies strong; and where class relations follow between ranks of the more or less certain, more or less capable and more or less powerful" (Gero 2007:313).

Linking the aim for certitude to tenacious, hierarchical patterns built by determination, capability and power, we see how the problem of trying to understand the past changes to concern the attainment of power. The past is accordingly not standing out, cannot stand out, as a wrapped, isolated parcel awaiting discovery. Already pervaded by mind that has analyzed and interpreted, categorized and conceptualized this disordered material, there cannot be brought about any 'science of the past'. There can only be a science of history that, therefore, never can act in isolation but only within a complex relation to its own particular context. According to Zander, in the function of history as a phenomenon of consciousness, such things as exaggerations of differences and black and white accounts of historical events take place with the ultimate aim of achieving a "/…/successful idealization of the past/…/" (Zander 2001:41, *my translation*). Arranged into causal connections, the past comes to act as a stabilizer for the present and its particular inquiries. Besides originating in the mechanical viewpoint, the working towards one sovereign claim can accordingly, at the same time, be suggested to occupy a *preferential* place.

Insights such as these may have increasing relevance when history concerns prehistory – in this case a distant Bronze Age. With the illusion of being protected through this distance, we tend perhaps far too rarely to confront ourselves with the question whether our primary task would involve something other than excavating past times. What is missing can be said to be more deep-going questions as to our own I. So far, we have touched upon the influence of the researcher in such terms as text-receiver/text-producer and reflexive attitudes. However, apart from such influences, in light of the alternative way of understanding outlined by Simmel, one can

wonder whether this I would not hold a much more central position while *operating as an actively participating component* in the investigation.

A way of finding out more about this position, may be through the ideas underlying and making up grounded theory, where a reflexive attitude can be said to be built into the very structure of thinking.

4.3. The art of double listening – towards an archaeologically suitable method

The method of grounded theory[77]

Grounded theory can be described as aimed at a grounding of theory in empirical data, as well as at the creation of new theories (Guvå & Hylander 2003:5). It was founded by Glaser and Strauss (1967) as a reaction against positivism. Since then, a number of versions of the theory have developed. This study will mainly rely on the outline as formulated by Guvå and Hylander (2003). This is based on both the original and the later works of Glaser and Strauss, as well as on other advocates of the theory. It maintains the view that the theory constitutes a *working method* that consists of various strategies of data collection and analysis, woven together into a circular play of reciprocal action (Guvå & Hylander 2003). The research starts from an actor's perspective with a focus on social actions. This makes the theory especially useful for studies in human interactions. It is aimed at discovering something new that will contribute to an understanding of a social process. The theory is proposed to be useful when the researcher is about to enter unexplored areas, or when known phenomena are investigated from new perspectives. With the actor's perspective, the researcher keeps within an exploring position, constantly reflecting upon the own attitude to the materials. Knowledge is hence created in the *process of interaction* between the

[77] The presentation of this theory will here be only briefly summarized. For more on this theory, see for example Glaser and Strauss 1967; Guvå and Hylander 2003. For a summary of doubts concerning the application of the theory, see Rogersdotter 2008.

researcher and the actor, as well as between the researcher and his/her own text. In this process, symbols of meaning take shape that will subsequently form into concepts, upon which the emerging, grounded theory will rest. The theory will not be built on simple, causal relations but on a pattern of cooperating processes. The concepts are thus viewed upon as tools, changeable in shape. Created throughout the process, they successively lay the way for the social event(s) to become understandable (Guvå & Hylander 2003:11ff, 29ff).

The working process

Due to the theory's emphasis on an empirical grounding, the working process of grounded theory is not linear in shape but simultaneous. It consists of a joint collection of data, coding, and analysis, while decisions as to what data to collect next are continuously made (Glaser & Strauss 1967:43ff). The process can on the one hand be described as *inductive*, since the area of research is new. On the other hand, it is *deductive*, since emerging assumptions are continuously tested against the empirical materials. When attempting to understand a phenomenon discovered by inductive exploring, with a theoretical assumption that is later to become deductively tested, the researcher does not however follow the common, hypothetic-deductive way of assumption. Instead, the researcher will make a 'leap in mind'; an *abduction*, which can be said to unite the inductive and the deductive attempts while creating new knowledge (Guvå & Hylander 2003:13f).[78] The simultaneous character of the working process has the consequence that different *stages of work* are used at the same time. Following Guvå and Hylander, four such stages can be discerned. The first one is the <u>Collection of data</u>. This begins very openly but soon turns more strategic. Aspects of social phenomena are searched for, following the ambition to understand general social

[78] The process of abduction can be said to consist of two steps. The first one is inductive; it is constituted of the formulation of a preliminary, hypothetical pattern from an individual case. The second step is deductive; the hypothetical pattern is tested against new cases, whereby the preliminary theory can become more general (Patel & Davidson 2003).

interactions. Thereafter follows the Coding, which also starts very open-minded. Descriptive indicators, which are seen as incidents of social processes, are sorted into categories. In the third stage, the Comparison, the codes are compared with each other and ideas emerge of how to relate different categories and concepts. In turn, the relationships become coded as well. Soon, concepts of more abstract qualities will emerge, constituting the structure of the new theory. The fourth and last stage, the Conceptualisation, constitutes a continuing creation of concepts by bringing the codes to increasingly abstract levels via ongoing comparisons and abductions (Guvå & Hylander 2003:34ff). According to Glaser and Strauss, a further, central entity is the Theoretical saturation, which determines when to stop sampling (Glaser & Strauss 1967:61).

The working process can also be described as linear steps or *levels*, each level containing all the four stages of work. According to Guvå and Hylander, the levels are four in number. The first one is called Naming of indicators. This constitutes a rather open-minded selection of data. Coded indicators are grouped into categories that are given quite basic levels. These are compared from the point of view of ideas what they may represent. The second level, Formulating concepts, consists of a more strategic data collection. Indicators are coded with labels that are more dynamic. By comparing the codes with each other, important aspects of the main area of research will be defined. At this level, the events are discovered and receive meaning. The third level, Searching for pattern, is a collecting of data for a more thorough insight into internal variations of the concepts. The previously established theoretical concepts become connected to each other. Their relations are compared and their internal variations tested. The aim is to reach an understanding of connections between essential aspects of the research area. In the fourth and last level, Generating theory, the 'core' is established. The data is very selectively collected for testing assumptions of relationships. The equally selective coding describes the core in both common and conceptual terms. The comparison now embraces the whole, knitting the main categories to the core. Modelled to a theoretical structure, the core outlines an understandable and explanatory picture of the discoveries made under way (Guvå & Hylander 2003:46ff, 75ff). *Theoretical sensitivity* is lifted forward as an important feature in the

process, in order not to remain on a descriptive level. This sensitivity will according to Glaser and Strauss disappear if the researcher only keeps to one single theory, losing the capability of seeing beyond the own most favoured line of thought (Glaser & Strauss 1967:46). Guvå and Hylander mention the concept of *reciprocal action* as a preferable structure of thinking in the working process, since the core is constituted of processes of interaction (Guvå & Hylander 2003:39ff). As Glaser and Strauss argue, the theory "/…/will tend to combine mostly concepts and hypotheses that have emerged from the data with some existing ones that are clearly useful" (Glaser & Strauss 1967:46). Guvå and Hylander accentuate in contrast the importance of grounded theory to produce a new theory (Guvå & Hylander 2003:39ff).

As can be observed, within this method of working, the researcher occupies a central role. Through the continuously ongoing process of interaction, the method implies not only a scrutinizing of the influence and effect of the own I. Rather, the I of the researcher is lifted forward as part of the very process. Would it, hence, on the basis of this mode of working be possible to gain an alternative attitude towards the past? That is, an attitude in which the archaeological materials could be met with in a different way than as parts of an all-embracing Something? In an earlier work, I have applied the theory as outlined and described by Guvå and Hylander on archaeological materials, mainly to investigate the usability of the theory (Rogersdotter 2008). Since then, however, some doubts have arisen as to certain points of it. These concern firstly the explicit demand of the theory to return to the empirical data, which may sound a bit superfluous for an archaeological approach. Of second concern is how the participation of the I can contribute in a more tangible way, in particular when considering the specific problems that underlie archaeological work in terms of fragmented, 'incomplete' materials. Thus, before proposing the theory as useful for archaeological materials, some key modifications need to be made.

Modification no. 1 – 'matter and'

Must an explicit demand for a grounding in empirical data indeed be necessary for an archaeological approach that usually starts from material evidence? The answer may very well be yes, depending on the way we choose to look at the content of this data. An altenative point of view may be found in a more outspoken emphasis on grounded theory's constitution of *abduction*. According to Bateson, abduction may be described as a "/.../lateral extension of abstract components of description/.../" (Bateson 2002/1979:133). As Bateson argues, abduction constitutes a fundamental condition for our thinking. Presuming that certain, formal attributes of one component are mirrored in the next, abduction can be apprehended as a double or manifold description of an event or an object.[79] The repetition of things within the process of abduction has according to Bateson a number of powerful implications. With this reasoning, well-rooted conceptions of various phenomena become tightly joined into a complex network of presumptions reciprocally backing up each other (systems supporting systems). Such a quality of double lodestars hence also becomes a *double requirement* that must suit both external claims of the surrounding world as well as internal demands for coherence of the organism (Bateson 2002/1979:133ff).

Lifting forward abduction as a central concept, the data could with this line of thought be understood not only as matter, but as *matter and the most intimate and immediate context of this*. With the combination 'matter and', we are not only referring to the objects – the concrete materials – but to the context of these, which in this case refers to the various theoretical ideas of approach that may surround these. Rather than solely returning to some 'naked' objects, we are thus returning to and collecting what could better be called *aspects*. This transferring of the objects into various ideas of reasoning constitutes the enterprise of abduction. Abduction is thus not only occurring in each level of work, but also in every collection of data. In understanding abduction as a double description or a double

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[79] One example is our study of the anatomy of a frog, after which we can look around to see other cases – other creatures – where the same, abstract relations prevail (Bateson 2002/1979:133).

requirement, we observe that it is not possible to embark on a search in which materials and ideas appear as separated entities. We also see that it is not either possible to search for one, all-embracing context. The reason is that none of these alternatives – the one disintegrating, the other sovereign – can invite to a double description. The double quality has for its part the advantage that every description – every collection of aspects – stands forward as an autonomously working unity. Although tightly connected with other parts or systems in the working process, every collection is thereby capable of operating on its own. This in turn should have the effect that the researcher becomes sensitive to how different parts react and adjust to each other as well as fit into each other. The parts emerge as immediate contexts forming integral parts of (as well as being themselves possible to divide into) other, immediate contexts. A double requirement for interior and exterior coherence can accordingly also be described as a double listening. Operating with unities and through them, the way of working becomes a double process that, therefore, is capable of providing room for different kinds of speaking.

Modification no. 2 – a twofold method of thinking

In order to grasp in a more tangible way the participation of the I in the process of archaeological work, we may attempt a deepened insight into the vital way of understanding outlined by Simmel. Simmel distinguishes the alternative process of understanding from three different forms. In order to base our reasoning in specifically archaeological circumstances, we may choose to start from three 'problems' of ontological character that Gero lists as characteristic for the archaeological discipline. These are labelled *Evidence as Underdetermining Interpretation*; *Data Sets as Interpretively Complex*; and *Evidence as Indeterminate* (Gero 2007:314ff). By connecting these problems to the three forms of understanding of Simmel, we may, rather than seeing the problems as a hindrance, strive to turn the view the other way round and regard them as both necessary and inspiring starting points for an archaeological investigation. By linking these points to the four stages of work according to grounded theory (Collection of data; Coding; Comparison; and Conceptualisation), the

points may become the foundation of and the possibility for these stages. With this, we should arrive at a grounded theory specifically formed for archaeological circumstances.

1. The moment of being left behind

The third archaeological problem or ambiguity that is listed by Gero is called *Evidence as Indeterminate*. This refers to the general indeterminacy of different archaeological data due to their incompleteness, such as destroyed or deteriorated objects; materials that are not preserved at all and thus totally absent from the archaeological record (such as basketry or textiles); blurred spatial boundaries; drowned shorelines; ancient landscapes now vanished and so on. This incompleteness reduces significantly what we can deduce from past societal structures. However, although continuously confronting this kind of indeterminacy, archaeologists do not always, as Gero claims, fully acknowledge this. In a number of cases, they choose to rely on conventional interpretation practices, or to fill up their writings with helpful expressions such as 'seemingly contemporaneous', or 'more data will be needed' (Gero 2007:316f).

The first form within which Simmel distinguishes understanding concerns the *perception*, which comprises the whole human being. It is not the individual eye that sees, but the whole human being as an observer, canalized through the isolated, sensory organ (Simmel 1999/1918:154ff). In this way, perception constitutes "/…/the fundamentally uniform way, in which a human being influences another human being, making up an assembled impression that cannot really be analyzed intellectually" (Simmel 1999/1918:157f, *my translation*). Now, if we turn to the historical understanding, this means that what is being preserved of actions, deeds and statements of no longer living individuals, *in principal contain that individual himself or herself*. Details may of course be missing and the result may appear more incomplete. The emerging picture may nevertheless exhibit details and relations that seem intelligible, without these having to represent copies of one's own experiences (such as stated by the mechanistic line of thinking) (Simmel 1999/1918:158f).

Based on this it could be possible to distinguish something

that could be regarded as a whole in the material assemblages – regardless their degree of incompleteness. That is, one would not be in need of 'knowing the total' (the whole, everything). Working as a whole undertaking, perception would with this become a prerequisite for a general and principal distinguishing of comprehensible situations. With this, it should become possible to search for and study different parts, irrespective of difficulties such as for example lost traces of other parts.

At this point, a second condition comes forth in the reasoning of Simmel that is of profound importance for the workability of perception; namely the presence of a 'you' that in the same way as the I works as *Urphänomen* (Simmel 1999/1918:160f). That is to say, the you is not to be seen as something that is attained only after one's own soul has been 'transmitted' to another body. Rather, conceptions within ourselves arise already from start, which constitute a you (Simmel 1999/1918:161). The distinction that seemingly exists between body and soul and which is supposedly in need of bridging, is therefore rather to be comprehended from the viewpoint of "/…/the uniform, fundamental fact, which one may call the you: a different human being, which is immediately apprehended as being animated" (Simmel 1999/1918:161, *my translation*). The you must be provided with a being-for-itself in the same way as the I, in traditional thinking, is considered to experience towards all other objects. In that way, the you stands on the one hand out as the sole opposite to the I. On the other hand, this you, just like the I, comes forward being in the possession of absolute reality and sovereignty. Acting as the transcendental fundament of the social human being, the you and the understanding accordingly appears as one and the same thing (Simmel 1999/1918:162).

In the presence of *one more*, of a you standing beside the I, it should appear easier to be content with one, two or a few aspects of the phenomenon one seeks to understand, as well as to include the presence of unexplainable parts within one's analysis. Since this other soul includes the "/…/unfamiliar, remote, not self-experienced/…/" (Simmel 1999/1918:178, *my translation*), the need may become eliminated of being obliged, as stated by Gero, to add phrases such as 'more data will be needed'. Likewise, this should obliterate a dubious rendering of possible differences into insignificance. In the light of

this, we may return to the archaeological indeterminacies as described by Gero. Now, we may propose a slight distinction to be seen. We cannot do much about our facing poor preservation or drowned shorelines. However, when we risk drawing false conclusions we could at least be actively aware of it. In contrast to the former group of indeterminacies, this has the ability of making us slightly co-responsible for how we intend to understand a particular past. Making this kind of analytical distinction, we provide ourselves with a useful elbowroom within which we can look for alternative possibilities. With this, we may turn the ontological problem summarized as indeterminate evidence the other way round. This may now appear as an essential starting point, from which we can search for those aspects within which our investigations will be grounded. This line of thought opens for a Collection of data that goes in line with the first stage of work of grounded theory. That is to say, we can engage in a process of collection that has at its disposal not only scattered, insufficient materials, but materials that can hint at *aspects of a social character*. This is made possible since we concentrate on links of perception between a whole I and a whole you, through which comprehensible situations have a principal possibility to appear. We thus arrive at a starting point that we may call *The moment of being left behind*.

2. Relation-Worlds

The second point of archaeological ambiguity listed by Gero constitutes *Data Sets as Interpretively Complex*. It refers to the complex issue when a variety of interpretive factors may seem equally relevant to a particular problem. It also accentuates the problem in understanding the interdependent mixture of several related parts of evidence. Within field practice, these kinds of problems can be seen in for example complex stratigraphy with a variety of seemingly discontinuous levels. Another example can be found in the problem of estimating ancient populations. Here, a multitude of factors need to be interrelated with each other and linked to estimated numbers of different groups of people. The sheer quantity of possible variables may overwhelm us completely in our undertaking and decision-

making. As Gero maintains, however, an outspoken recognition of these difficulties is seldom found (Gero 2007:315f).

Coming to the second form of understanding, this concerns the previously touched upon distinction between *objective* and *historical* understanding, or the complicated relation between *parts and their context.* According to Simmel, every part in a particular, historical situation is to be understood as an individual, psychical *content*. If, as Simmel exemplifies, a historical event is caused by hatred, we may, through a trans-historical, objective understanding, understand the subjective meaning of this feeling irrespective of when or where it occurs. The different parts must however at the same time be put into a temporal succession. The former aspect of understanding thus tells about a content of an over-individual, timeless character, while the latter concerns the real situation, in-between a number of elements, which provides the former, the material, a particular *form*. Understanding is reached when the elements, which are discontinuous in character and appear as timeless moments, seem to appear connected to each other, linked by and permeated by continuous life. This means on the one hand (and as was previously mentioned) that every kind of content of a 'liberated production' to use Simmel's way of expression can be regarded as equally right. However, on the other hand, it means that it is 'we ourselves' (the human beings engaged in the process of understanding) who create what constitutes – or what appears as constituting – the wholeness or totality of this product. Due to this, the two forms of understanding cannot be comprehended as two independently working, parallel operations (Simmel 1999/1918:163ff, 168f). This may be described in the following way: the objective understanding can never in itself stand out as 'complete', but only through our intervention (the intervention of a human being). By this, a form takes shape, which in turn can never constitute the sole form, since it starts from an objective content and with that cannot be based on any criteria of true/false. In the end we thus get a perpetual creation of form*s.*

This reasoning may accentuate a kind of spatial context of the process of understanding. It elucidates in a more detailed way the circumstance that understanding is reachable despite not knowing all objective significations in question. It shows, firstly, that what is unexplainable *must* be included. It is what makes up our world,

following from the viewpoint of the world as twofold. Secondly, it highlights that it is not a matter of putting together of 'facts', but rather about the following up of situations (Simmel 1999/1918:178f).[80] From a mechanistic point of view, 'understanding' would appear as putting together facts of one particular phenomenon that *is*. However, the parts that are to be related cannot be understood as incomplete, splintered fragments of a whole, absolute context that once was, since it *never has existed*. The task of relating relevant parts to each other may rather be compared with the previously discussed undertaking of abduction, forming a kind of first step of that procedure (a detaching of certain features according to double requirements for interior and exterior concordance). With this, we get a contrasting situation, which rather than putting together indicates a process of *analytical subdivision* in order to get at repetitive details. We arrive in other words once again at an emphasis on the 'most intimate and immediate context'. Every part that is to be related can, hence, be approached as an autonomously working unity.

In what way, then, are we to comprehend these parts or unities? As above noted, according to Simmel, the process of historical understanding concerns the following up of situations. This may become easier to understand with the emphasis by Simmel on the 'microscopic molecular processes'. According to Watier, for Simmel, these constitute those processes that through a web of relationships that constantly form, dissolve and reform again, link individuals to each other. They therefore become the foundation for society, from which follows that even the smallest, reciprocal actions between two individuals are of relevance for the study (Watier 2008:97ff). Here, we can suggest that the emphasis on what constitutes the smallest or the 'most intimate and immediate' accentuates these processes. This is the case since, as we can deduce from the above discussion, an 'act of completion' only takes places when a particular product is being engaged with. This means that micro-processes of reciprocal actions between individuals of the past are what make the situations that we are looking for *real* and *complete*. The autonomously working unities

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[80] A 'putting together of facts' appears under present conditions rather as called forth by our own unfortunate confusion, evoked by our ignorance of this analytical division.

that we are focusing on would with this view become based on relational phenomena. Contrary to a traditional, object-centred search, this means in other words that what we should focus upon should rather be the 'in-between', since it is here that the *forms* of the unities (or: their character of completeness) should take shape and be distinguishable. What we hence are looking for can, in a broad sense, be described as traces of processes of understanding in the past. We thus reach an investigation where form and content are to be separated, and where form takes priority over content.[81] We moreover see that a context cannot be attained by a simple accumulation of objects. The context is rather to be understood by a variety of matrices for situations.

The reasoning can be made clearer with the constructionist outline of Hall (2003/1997) concerning *systems of representation* and the process of creating meaning in culture. Hall distinguishes two such closely related systems. The first one concerns the production of meaning through the construction of correspondences between things and our conceptual maps (system of concepts). The second system relates to the creation of meaning through the shaping of correspondences between these conceptual maps and sets of signs that come to represent these concepts. 'Representation' thus constitutes the process that in this way links the three elements things-concepts-signs. According to Hall, this constitutes the core of the creation of meaning within language.[82] Signs can be distinguished into iconic signs and indexical signs. Iconic signs resemble the things they refer to, while indexical signs bear no resemblance to the things in question. The latter show that the relationship between sign-concept-thing is arbitrary. This in turn raises the question how people, sharing the same language system or the same culture, are able to know that a

[81] A more outspoken, concrete use of the method of form outlined by Simmel, and aimed at separating 'form' from 'content', can be found in Chapter 6.

[82] Language is in this connection to be understood in a broad, inclusive sense, referring to spoken or written languages, as well as visual images, the 'languages' of fashion, of gestures, of facial expressions and the like. Sign may, besides being written or spoken, likewise consist of sounds, painted marks, images (like photographs), electronically transmitted, digital impulses or other, material objects. Thing, lastly, may stand both for people or objects, as well as for, say, experiences, ideas or events (Hall 2003/1997:18ff, 23ff).

certain, arbitrary combination of sounds and letters stands for a certain concept (Hall 2003/1997:20f)? This is possible, as Hall maintains, by our use of the *code* that sets the correlation between our conceptual maps and signs. In this way the code firmly stabilizes the meaning until it comes to seem inevitable. Culture, then, could be understood in terms of this sharing of ours of concepts and languages and of "/…/*codes which govern the relationships of translation between them*" (Hall 2003/1997:21). This implies that the meaning of language, resulting from social, linguistic or cultural conventions, can never be spoken of as finally fixed. It is always subjected to changes. The meaning cannot furthermore be inherent in the thing, nor in the word. Rather, it is produced through a *signifying practice*, a practice giving things meaning. This is the practice of interpretation; our undertakings of 'encoding' (placing a thing within a code) and, at the other end, 'decoding' (interpreting the meaning of the thing) (Hall 2003/1997:23ff, 62).

Translated into Hall's reasoning, the point of our focus on reciprocal relations is a search for systems of codes, or *signifying practices*. That is to say, a search for past people's active encoding- and decoding practices, which should be found in that range of minute phenomena making up everyday life.[83] That these practices are to be searched for in the in-between is clearly shown in Hall's own example of the 'language of traffic lights'. What is signifying in the traffic lights is not the colours in themselves, but the circumstance that they *differ* from each other. This accentuates that meaning depends on the relation of a specific sign and a specific concept that in turn needs to be fixed by a code (Hall 2003/1997:26f). It could thus be said that the meaning, when analytically surveyed, 'moves' out of the concept, whereby it should become more visible.

By searching for perpetual creations of independent, as well as intricately linked unities, it could be suggested that the problematic appearance of the problem *Data Sets as Interpretively Complex* becomes reduced. Like the previous problem, it can be seen as a challenging starting point instead. This is the case since, as shown, the issue of finding out how a multiplicity of pieces might be interacting above all

[83] A more outspoken search for this can be found in Chapter 6.

concerns a flexible handling of unities of a noticeably immediate character, whose 'meanings' may become more easy to trace since they are not residing within any static, non-reachable concepts but depend *on relations*. Alluding to reciprocally working, micro-sized relations between individuals of the past, this demonstrates a mode of procedure in accordance with a double requirement for interior and exterior coherence. Having this multiplicity at hand also accentuates that we may not only miss, but should miss, a number of conditioning factors – or we would, still, follow along the well-trodden path of absoluteness. The second form of understanding thus makes the second and third stages of work of grounded theory, the processes of Coding and Comparison, possible. With this form of understanding, we find a basis for categorizing and comparing various, immediate and independently working *incidents of social processes*. The term for this second starting point may be *Relation-Worlds*.

3. Signifying principles

The first group of ambiguities listed by Gero concerns *Evidence as Underdetermining Interpretation* (Gero 2007:314f). This refers to the inadequacy of data; the lack of deciding factors, which means that a specific explanation or interpretation cannot be fully determined. A typical example is the detailed chronological relationships among data, since we cannot be certain that objects found close to each other were used at the same time, or even whether they were used within the same phase of occupation. However, as Gero accentuates, these kinds of ambiguities are seen to be recurrently removed by archaeologists, thus ending up with "/…/a single most plausible interpretation/…/", which thereafter becomes inbuilt into further assumptions (Gero 2007:315).

In the third form of understanding outlined by Simmel we find a concern for what can be termed *our own participation or engagement*. In the previous form, the main point was about the capability of understanding something within a particular situation (exemplified with hatred). This form concerns the capability of understanding this thing (this hatred) in itself. With this reasoning, which is based on *the dualistic character of the elements*, we move from a

spatial to a temporal context. As Simmel argues, in radical historicism, to gain an understanding of a particular state of things, it is regarded as sufficient to know what kinds of preparations may have made this state happen. Here, however, the distinguishing between the *psychical* and *timeless* contents of the elements is emphasized (Simmel 1999/1918:170f). To understand something historically, such as a particular doctrine, it must be deduced historically, whereby the way leading up to the specific doctrine appears as successive steps in a staircase. However, such derivation would not become possible, would the different steps (the different ways of thinking leading to the particular doctrine) simultaneously, and through their objective validity, not appear to us as understandable series in themselves. The key for this understanding is namely not relying on the chronological relation in the way that one step or standpoint develops into another. This is not possible, since these are closed in themselves and therefore not able to provide each other with understanding. Understanding is rather deduced from these individually understood steps through the creation of the *methodological subject* (Simmel 1999/1918:171ff). This creation of ours is the reason why we think we can distinguish a successive development.[84] This means that we derive the objective series of closed steps or standpoints from a subject of fictive character.[85] With this reasoning follows an involving position from our own, visualizing psyche. What we for example perceive as a successful development within the series in question is actually the feeling of our own, inner development of our mind (Simmel 1999/1918:173ff). At this point, we realize that the reason for our understanding of something, like revenge for example, is not

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[84] The same constructed subject is also the reason for our understanding separate phenomena, such as hatred, which would otherwise appear to us as nothing but meaningless words (Simmel 1999/1918:175).

[85] An illustrative example constitutes a series of paintings discontinuously arranged by an art historian, thereafter to be linked by the same art historian to a successive development that is seemingly based on objective criteria such as plainness-abundance or uncertainty-control. However, when seen from the viewpoint by Simmel, we apprehend a developmental sequence through the creation of the methodological subject. This appears to flow through, and by that to connect, the paintings within a diachronic, continuous and psychologically comprehensible process (Simmel 1999/1918:174f).

dependent on the fact that it follows, say, a former injustice. Rather, it depends on our capacity of visualizing these two phenomena as making up two waves within a uniform flow of life. This links moments or events to each other, at the same time as this very linking constitutes a prerequisite for understanding the concrete occurrences within these moments or events (Simmel 1999/1918:175ff). Understanding thus comes forth as a phenomenon of totality that is summarized by Simmel as *the human being's relation to the surrounding world*. On the one hand, the psychically substantial developmental series, sorted chronologically, is hence solely to be understood on the basis of the objective and trans-historian relations of each content respectively. On the other hand, the process of consciousness that implies the through-flowing current of the own psyche appears as the prerequisite for an objective sorting of things. It acts

> "/.../as a form-giving a priori/.../[that can] soften the bridgeless closedness of every content and compensate this with that continuity, which alone can be called development" (Simmel 1999/1918:177, *my translation*).

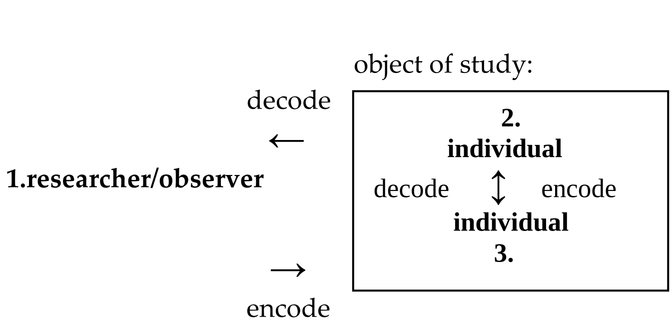
However, the objective and the psychical development constitute only methodologically separated aspects of what in reality is one and the same unity, in which the elements, if they *are allowed to be independent*, build up each other in a continuous and reciprocal circle process.[86] Understanding accordingly represents – and this, as Simmel maintains, passes by unnoticed by the mechanical point of view – a subjective activity that is dependent on those categories and forms through which the subject acquires the object (Simmel 1999/1918:177ff). This in turn shows us clearly how this reasoning manages, as quoted above, to include that what is unfamiliar and not self-experienced, which at this point is expressed as the creative element within the process of understanding (Simmel 1999/1918:178). Through this same element, we simultaneously get a glimpse of how deeply involved the own engagement is in the process. While the

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[86] A process that simultaneously expresses the fundamental state that the mind, while being conditioned by life, in turn creates those forms by which life becomes intelligible (Simmel 1999/1918:178).

process comprises the human being’s fundamental relation to the world, we understand that the main point is what takes place *between* the researcher/observer and the things that are being observed. This emphasizes the connection between the double requirement and the act of double listening. Coming this far, we discern that the various, microscopic relationships upon which society, according to Simmel, is built also include the researcher/observer. We see that the mentioned reciprocity all along, and at the same time, comprises the researcher’s/observer’s own, *active participation*. The researcher/observer completes the act of abduction, as well as com-pletes the particular, past situation in question. Here, again, an autonomously working unity becomes created.

This significant, twofold character or doubleness may perhaps become more distinct with a return to Hall’s concept of representation (2003/1997). We now see that the work of representation necessarily must include an active participation of ourselves. Since the things that I must engage in, as a researcher/observer, are subjected to continuous encoding and decoding, it cannot be a question of only decoding the objects of my study. Meaning, as Hall puts it, “/…/is a dialogue – always only partially understood, always an unequal exchange” (Hall (2003/1997:4). To become part of this dialogue I must engage in the act of encoding as well. In the end this gives a three-headed relation of the process at work:



With this said, we clearly notice that the two processes of production of totalities, or fulfilments – the two creations of processes of understanding – with necessity must be related. We furthermore see that these relations cannot be static, but that they constitute

continuously ongoing processes. Of main importance is thus what occurs *in the connecting links*, which results from the fact that the process of understanding operates with and through a world of a twofold constitution.[87] The mentioned steps are for example not to be conceived of as dead, but as parts that exactly because of their being kept separated manage to take part in continually ongoing, micro-sized interplays.

Coming so far, we may return to the problem of the *Evidence as Underdetermining Interpretation* mentioned by Gero. First and foremost, we must realize the difficulties inherent in that archaeological task we are attending to. We must manoeuvre with caution and with regard to the presence of the unexplainable. If, then, there is a solution to these kinds of brushy underdeterminacies, this should on the basis of what has hitherto been said presumably be named twofold thinking. A *two* as a solution to the sovereign line of explanation that is criticized by Gero. The undertaking would thus necessarily demand a you. More exactly, the aiming at an understanding of situations – liberated products – in both this way *and* that, must be grounded in the idea of a you[88], a you that would only be distinguishable through the allowance of what is *unfamiliar*. This in turn emphasizes that we must consciously acknowledge, as well as actively embrace, our own, interactive part within the process of understanding/course of life. Coming this far, we can see that the method outlined by Simmel should by its practice of detaching and reconnecting make the manoeuvring easier while offering a by-pass around the pitfall constituted by the question characterized by the verb 'to be'. Based on this method, we would moreover presumably be content with the defining of unit*ies* instead of being tempted to bring together (assimilate) these into one, single unity. In this way, we could turn the reasoning of Gero the other way round, by perceiving

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[87] In line with this, Simmel is for example throughout working on matters that are closed, which, then, in a subsequent step become flowed through, so that constant openings are brought into being and connections are being made.

[88] If not, the procedure would not only be meaningless – I would not consider myself being in the slightest need of such procedure – but also impossible – I would not be capable of dividing up myself. And since I cannot divide myself, the situation can only as *either* this *or* that resemble myself. That is to say, I can solely entertain an understanding for the situation in one, single way (it *is*/*was* like this, but *not* like that).

traces of (micro)relations within practically *everything*. That is, we could distinguish in everything what could be called *Signifying principles* – principles of deep-going, social significance, the search of which constitutes the third archaeological starting point. The dividing up and subsequent reconnecting can be compared with the separated stages of work put forward by grounded theory. Through the suggested process of gaining an understanding of individual elements, which are subsequently to be reconnected again into 'waves within a uniform flow of life', it should hence be possible to lift the compared concepts into *increasingly abstract levels* (to Conceptualize).

Modification no. 3 – the defining of a working grid

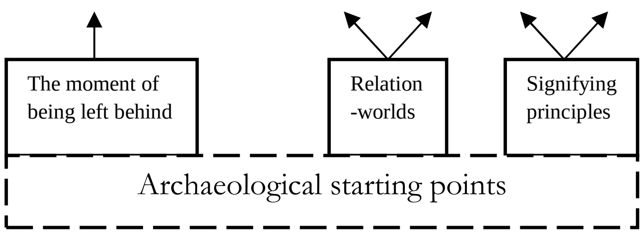
The emphasis on abduction – that is, the gaining of a view within which the Collection of data comes forward as autonomously working unities – has the consequence that the different levels of work of grounded theory appear in a somewhat different light. In the model of grounded theory outlined by Guvå and Hylander, the four levels of work follow upon each other in a linear way. In this context, however, the levels of work, although building upon each other, receive through the modified approach a more autonomous air. The four different, internal stages of work (Collection, Coding, Comparison and Conceptualisation) also appear as more autonomously working, due to their springing from the archaeological starting points. Based on this, we can sketch a methodological outline in the form of a grid (fig. 4.1.). This grid is composed of four horizontally going rows (the levels of work), each consisting of four compartments (the stages of work). The labels of the stages of work are placed at the top of the grid, whereas the labels of the archaeological starting points are placed at the bottom of the grid. The reading direction follows the four rows, beginning with the bottommost row and the bottom left square. The advantage of this outline is that each level, as well as each stage of each level, can be handled and scrutinized individually. They form into different ways, or compartments, of a testing character, which have validity irrespective of the successes or failures of the other levels or stages.

Summary

The different modifications have adjusted grounded theory so that this suits archaeological investigations better. These have in different ways given the opportunity to approach fragmented archaeological remains as adequate unities in themselves. With the combination 'matter and the most intimate and immediate context of this', the collected data appear as autonomously working unities. With the 'following up of situations' every part of the investigation can be approached as an autonomously working unity. Linking the 'situation' of the past to the I also brings forward autonomously working unities. Due to their freestanding character, the levels and stages of work appear in turn as separate unities. Embracing these modifications – the emphasis on abduction; the acknowledgement of archaeological starting points; and the utilization of the working grid – it should, with the use of grounded theory, be possible to approach the past(s) as adequate and complete unities. This way of working will therefore be adopted by this study.

Fig. 4.1. Methodological outline in the form of a grid.

Stages of work → Levels of work ↓	Collection of data	Coding	Comparison	Conceptualisation
Level 4 – Generating theory				
Level 3 – Searching for pattern				
Level 2 – Formulating concepts				
Level 1 – Naming of indicators				



5
Game-related Materials and Archaeology – a deconstruction of documentation and publications of Mohenjo-daro –

Du sollst aber nie vergessen, was ich dir so oft gesagt habe: unsre Bestimmung ist, die Gegensätze richtig zu erkennen, erstens nämlich als Gegensätze, dann aber als die Pole einer Einheit.
-Hesse, *Das Glasperlenspiel* (2002/1943:79)

…such a glut of them has been found...
-Mackay, *Further Excavations at Mohenjo-daro* (1938d:560)

According to Mackay, "/…/such a glut/…/" of dice of the tabular or long type, and "/…/considerable numbers/…/" of gamesmen have been found at the site of Mohenjo-daro (Mackay 1938d:560, 570). Yet these, as well as other finds from the site, which Mackay has stated to be game-related have not gained much scientific attention.[89] A reason for this lack of attention may be seen in the problematic nature of these kinds of finds. Firstly, we cannot be certain that they really have been used in game-related contexts. It cannot be established with certainty whether for example a specific, cone-formed object of, say, terracotta really has been made with the intention of being used as a game-related utensil, and not instead has been manufactured as a tool for the building techniques of that time.[90] On the contrary, since in

[89] For a research history on game-related materials from Mohenjo-daro and other Bronze Age Indus Valley sites, see Chapter 3.

[90] The example concerns a particular kind of cone-shaped, pointed object that recurrently appears in a narrow, 'carrot'-like form and which is dealt with in more detail below, under the sub-heading 'Cones'. Professor Kenoyer has kindly drawn my attention to the fact that these objects may have been used as tools or instruments in connection with the construction of buildings. A large number of these cones have been found under the city wall at the site of Harappa. He suggests that they may have been hammered into the ground in order to form straight lines in preparation for the construction. This could also explain their in most cases broken points (oral com., Kenoyer July 2010). The interpretation sounds plausible and perhaps a future

principal whatever is 'at hand' can be used as game utensils, it is a difficult task to distinguish between game-related- and not game-related remains. Secondly, we have a range of problems concerning the source situation. The main part of these finds derives from the large-scale excavations conducted at Mohenjo-daro in the 1920s and 1930s. The methods of digging at that time do not correspond with today's demands on exactness and the great majority of the excavated finds would today be difficult to relocate horizontally and vertically (see below). Large numbers of finds from these excavations, including parts of this particular material, have in the course of time further-rmore become dispersed at various museums around the world, or got lost in different ways. To reassemble 'complete' collections of finds for a survey and relocation by now appears more or less impossible. Concerning the written sources, the listed artefacts of the two published excavation reports of the large-scale excavations have been estimated to correspond to only about 30% of the real number of finds (Jansen & Urban 1985b:VII). As to the field registers, these contain sometimes meagre or indistinct information. In accordance with the spirit of the time, the excavation reports and the field registers may moreover contain descriptions that are made up of problematic mixtures of 'facts' and 'interpretations' (see e.g. Jansen & Urban 1985a).

How, then, are we to behave facing this once excavated material? Are we to conclude that it cannot be studied? Or should we simply take no notice of it? Does it not exist? Looking into the two published excavation reports, we see that a great amount of detailed information has been recorded about the artefacts that were interpreted as game-related objects; as much and as detailed as about other types of items. In both reports, most of the game-related information is even to be found in specifically devoted chapters named *Games and Toys* (Mackay 1931c, 1938d). On the basis of this amount of information, we can suggest that material traces of a game-related

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excavation in Mohenjo-daro would indicate whether this would be the case at this site as well. What appears as somewhat doubtful in this connection is why the cones at least for the part of Mohenjo-daro in several cases have been decorated, why they appear in different 'sub-types' with a sometimes rounded base, and why they at least in the DK-C and the HR areas are to a large part found dispersed.

character indeed exist. This is an essential point, since an existence cannot possibly take shape out of something without content and randomly scattered. It may be added that so far, there are few or no research results of later date that unambiguously contradict the interpretation of these objects as game-related. If, accordingly, such existence can be counted on, the question arises what these – traces of the particular ways in which game-related activities order the world – may possibly look like?

At this point, however, the question arises how we can go about in order to study this impossible material without forgoing a critical attitude. One way to do this may be to avoid the problematic question whether the material *is* game-related or not, since such a question is more or less impossible to answer. Starting from the assumption that game-related traces in some or the other way must exist, we may choose a different path in which we advocate the view that the 'problematic air' surrounding these kinds of artefacts is actually deriving from and thus dependent on the way we formulate our inquiries about them. With this view, we would be provided a way of disentangling this air. This in turn would open up for a different way of reading the written sources. Despite their shortcomings, we could regard them as fully adequate sources of information that to different degrees, and while complementing each other, can respond to our formulated inquiries. While in this way searching for different entries into the sources (different ways of deconstructing them), we would be able to consider them critically, at the same time as we would not be forced to dismiss them. Thus, by use of a way of working that tests itself along different routes, we may have a closer look at this kind of material through a thorough study of the written sources (the unpublished and published accounts from the large-scale excavations). We are in other words not aiming at a systematic division between what *is* game-related material and what is *not*. Rather, the scrutinizing of the sources is undertaken with the aim of distinguishing repetitive patterns in the material. The goal is to test the existence of this material and to see whether it can be studied at all. Last but not least, we will also find out whether it can provide any archaeological information of value.

5.1. Archaeological studies in the DK-C area in Mohenjo-daro

The DK-C area

Between 1924 and 1938, during the large-scale excavations of Mohenjo-daro, about 38 000 find registrations were made (Ardeleanu-Jansen, et al. 1983:45). This analysis concentrates on game-related finds from the DK-C area, which constitutes one of the smaller areas of the settlement (fig. 5.1.; see the fold out plan of the DK-B and C areas at the end of the book[91]). It lies in the eastern part of the 'lower town' and its western part is connected with the area of DK-B. DK-C is approximately 7 800 square metres in size (Scholz 2005:32). An east-west going street separates blocks 1-4 in the north from blocks 5-16 in the south. Another, 170 metres long street extending in a west south-west-east north-east direction separates block 11 in the north from block 12 in the south. The topography is hilly. The area slopes down east of the DK-B area towards block 12 in the south-east 'corner'; then rises again towards the north-west north up to block 6. Blocks 1-4 rest at the foot of a hill (Scholz 2005:32) (fig. 5.2. and fig. 5.3.). During the first season of excavation in the area, more than 2000 finds were found and three levels of occupation could be distinguished (ARASI 1990/1925:67). In the following season, it was established that there was a greater number of finds in the lower levels. The hill just north of the area was said to consist of a massive core of pottery and brick and was thought perhaps to have been a temple (ARASI 1990/1926:87f). Mackay notes in the published excavation report (1931a) that the area consists of both Intermediate and Late Period walls. The former are in general much thicker than the latter. Structures of the Intermediate Period were sometimes filled in with mud to support buildings of a later date. The mud was made up of either mudbrick or wet mud. Eight blocks are said to consist mostly or totally of Late Period

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[91] In the published excavation report, 'east' has been placed at the upper end of the plan of the DK-B and C areas (Marshall 1931a:Plate LXII). For the sake of convenience, the plan is in this work shown with the 'north' at the upper end, as is usually the case.



Fig. 5.1. The DK-B and C areas with point coordinates visible (from Marshall 1931a:Plate LXII).

structures, sometimes resting on foundations from the Intermediate Period (blocks 2, 7, 9, 10, 13, 14, 15, 16).



Fig. 5.2. View from the hill south-east-southwards, showing the DK-C area in 2007 (photo by the author)



Fig. 5.3. The same view as in the previous figure, taken during the time of excavation in the 1920s (SV 2: D9R00301). Courtesy of Prof. Jansen, RWTH Aachen University.

Four blocks have walls of both Intermediate Period (thicker walls) and Late Period (thinner walls) (blocks 3, 6, 8, 11). Three blocks consist mostly or entirely of Intermediate Period buildings (blocks 1, 5, 12). Nothing is said about the only partly excavated block 4.[92] An unusual find of a silver vase containing gold and silver ornaments was made in block 16. The east-west going street in the north is noted as 29 feet wide (8,7 metres), and "/…/amply provided with drains and soak-pits/…/in an excellent state of preservation" (Mackay 1931a:242). The lane between blocks 11 and 12 is five feet and 10 inches wide (1,75 metres) and has two drains running at different heights along its length. On both sides of the lane, the walls are noted as "/…/quite imposing". In addition to these two streets, a number of smaller lanes can also be noted; such as between blocks 3 and 4, east of block 8, north of block 10 and west of the 'middle house' in block 11. As in other parts of the settlement, a number of wells can be found at different parts in the area (Mackay 1931a:242-250).

The division between DK-C and DK-B is artificial. The area of DK-B begins west of block 16, stretching west and then northwards. The area is divided by a nine metre wide street going in a north-south direction, with two areas of blocks on each side (Scholz 2005:32). The area consists mainly of buildings of the Late Period. The famous statue in steatite known as the 'Priest-King' was found in block 2 (Mackay 1931a:236). The complete area, encompassing both DK-B and C, is 11 800 square metres (Scholz 2005:32).

K. N. Dikshit and the excavations of DK-C

Excavations at DK-C started with the opening of trial trenches and the clearance of some of the structures through which the trenches run during the season of 1924-1925. The excavations continued on a larger scale in the next season, 1925-1926, when both mounds of DK-B and C were cleared (Marshall 1931c:11f) (fig. 5.4.). Deep digging was never carried out at DK-C, since this, except for a few occasional trenches, was not undertaken at Mohenjo-daro before the season of 1927-1928

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[92] For more details on specially equipped structures, see the sub-chapter 5.4.

(Mackay 1938b:xi; Marshall 1931c:13). The excavations of DK-C were led by the archaeologist Rao Bahadur Kashinath Narayana Dikshit (Possehl 2002:12).[93] During the work at Mohenjo-daro – the excavators had to camp in the open since no buildings had yet been erected at the site – Dikshit, according to Marshall, lost his health before he could complete his work. Therefore, he could not collaborate in the writing of the published excavation report (Marshall 1931c:11ff). The chapter dealing with the DK-areas has on these grounds been written by Mackay (Mackay 1931a).



Fig. 5.4. Excavation of the DK-C area in the 1920s (SV 2: D1R00907). Courtesy of Prof. Jansen, RWTH Aachen University.

[93] Dikshit was a Sanskrit scholar who had studied at Deccan College in Poona and had held positions as curator of the Prince of Wales Museum in Bombay and the Provincial Museum in Lucknow. In 1924, he became superintendent of the Western Circle of the Archaeological Survey of India (ASI). Later, in 1937, Dikshit became director general of the ASI. Besides leading the excavations at Mohenjo-daro in 1924-1925, he also, on Marshall's order, conducted a survey of further archaeological sites in Sindh (Lahiri 2006:277f).

DK-C as a 'case'

The choice of concentrating this work on game-related finds from the area of DK-C is on the one hand dependant on which field registers were presently available (see below). On the other hand, however, it also results from the fact that the area belongs to the smaller neighbourhoods of the settlement, and has been given less attention than for example the much larger DK-G and HR areas, or the areas of the 'upper town'. I found it exciting to see what would come out of an investigation of a more unknown part of the settlement. What is more precisely of interest here are game-related finds that were unearthed during the first season of excavation of the area and the beginning of the next season. Again, this is due to which field registers were available. The in this way much more limited number of finds to concentrate upon is however also suitable for the in-depth analysis aimed at in this work. According to the field register, the excavation started on the 24th of December 1924 and ended on the 12th of February 1925. It began again on the 21st of November and carried on until the 10th of December 1925. Besides the game-related finds from DK-C, game-related materials from the HR and DK-G areas have been included in the analysis for comparative reasons.

Horizontal orientation systems of the large-scale excavations

In total, four different horizontal orientation systems were used during the large-scale excavations in the 1920s and 1930s. Systematic recording in field registers started with the season led by Dikshit in 1924-1925. An orthogonal orientation system was then in use that, going along north-south/east-west axes and measured in feet, provided *point coordinates* for the horizontal localization of finds (Ardeleanu-Jansen, et al. 1983:45). Dikshit probably made use of a geodetic net that covered the entire area of excavation and which had apparently been drawn up by Francis, who later (in 1926) made the first topographical map of the site (Ardeleanu-Jansen 1985:XIII). From the season of 1925-1926, when Marshall was in charge, the point co-ordinate system was changed to an *area coordinate system* (Ardeleanu-Jansen, et al. 1983:45). The geodetic net that was used seems to have

been the same as the one used previously for the point coordinate system.[94] The grid was based on squares or units 100 feet in size, which were in turn divided into twenty-five sub-squares 20 feet x 20 feet in size. The points were labelled numerically along the north to south axis and alphabetically along the east to west axis. Thus, an entry formulated as 38 Y/13 denotes the vertical coordinate (38), the horizontal coordinate (Y) and the subsquare within this unit (13) (Ardeleanu-Jansen 1985: XIII).[95] The area coordinate system is thought to have been adopted to facilitate and rationalize orientation during excavation. However, the precision of the previous point coordinate system was thereby lost, since the exact position within the specific sub-square in question could not be obtained (Ardeleanu-Jansen 1985:XIIIf; Ardeleanu-Jansen, et al. 1983:45). In the beginning of the season 1926-1927, with Mackay, the horizontal location system was changed again, from the use of coordinates to a *compartment numbering system*. Instead of using the existent grid, this probably consisted of providing areas found to be enclosed by walls with a sequential room number, which was kept even when digging deepened (Ardeleanu-Jansen 1985:XIIff). In the published reports of the excavations, none of the previous horizontal orientation systems were used. Here, a fourth numbering system was applied, where the structures were divided up into *blocks, houses and rooms*. Artefacts were registered by block number, house number and thereafter the number of the room, open space, courtyard or street (Ardeleanu-Jansen 1985:XIV; Mackay 1931b:xiii).[96] [97]

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[94] A shifting seems however to have occurred for the DK-C area; see more on this below.

[95] The 100 feet squares or units of the area coordinate system are to be seen on some of the published maps, such as the one for the DK-B and C areas (Marshall 1931a:Plate LXII) (see fig. 5.1.).

[96] Correlating the old room numbering system with the published one constituted one of the main problems for the re-writing of the field register for the HR-area. This was done among other ways by comparing the noted find spots for the registered finds and the published objects (Ardeleanu-Jansen 1985:XIV).

[97] Publishing this system, it came at the same time to constitute the final structural interpretation of the excavated structures (Ardeleanu-Jansen, et al. 1983:46).

Vertical orientation systems of the large-scale excavations

The vertical orientation systems applied during the large-scale excavations of the 1920s and 1930s were not based on any habitation layers but on depth measurements. At the beginning, the vertical orientation system consisted of relative depth measurements, measured from the surface and downwards ('below surface', with measurements given in feet and inches). When Mackay arrived in 1926, he changed this system into absolute depth measurements, and locations of the finds were now related to the absolute altitudes of bench levels ('below datum') (Ardeleanu-Jansen 1985:XV). Mackay applied the system of absolute depth measurements in the DK-G and the L areas (Ardeleanu-Jansen, et al. 1983:Pl.1).[98] Since this system was based on the assumption that the settlement had a similar vertical growth and took no considerations of stratigraphic layers, it later became much criticized (Jansen 1986:52f; see e.g. Wheeler 1954). However, and despite the rightful critique, the system of absolute depths can nevertheless be useful when attempting to relocate artefacts three-dimensionally (Ardeleanu-Jansen, et al. 1983:46). As to the relative depth measurements, on the other hand, vertical studies are only possible for the individual 'columns' made up, say, of the same point coordinates (Ardeleanu-Jansen 1985:XV). The reason for this is that equivalent relative depths in adjoining areas may in reality differ depending on the difference in topography of the mound in question. Therefore, direct comparisons of relative depth measurements from different locations cannot be made. In order to do this, one has to convert these into absolute depths (Ardeleanu-Jansen 1985:XV; Ardeleanu-Jansen, et al. 1983:46).[99]

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[98] He also converted the relative depths of the architecture of the areas published by him, in the publication edited by Marshall, into absolute depths. This concerned the areas DK-A, B and C, as well as the SD-area (Mackay 1931a, 1931d). This was however naturally not possible for the artefacts found in the areas, which therefore are mentioned with their relative depth measurements in the publication (Franke-Vogt 1991a:22 footnote 14).

[99] In the relocation of the finds of the Great Bath (the tank), the conversion to absolute depth could only be made for one single find. The relevant sub-squares could by means of comparing modern levelling of the surface and structures with old photographs, taken during the excavations, be converted into absolute levels

Horizontal relocation of finds of DK-C

For the horizontal relocation of the finds, I firstly needed to reconstruct the original point coordinates. For this, I was helped by a previous relocation of the finds of the Great Bath (the tank) (Ardeleanu-Jansen, et al. 1983:49). This relocation made use of an unpublished plan of the Great Bath where the grid network was shown. With the help of trench F, it became possible to reconstruct the point coordinates as well as correlating the two orientation systems (Ardeleanu-Jansen, et al. 1983:50). Since the reconstructed point co-ordinates correlated with the grid plan and since the grid plan is shown on the plan of the DK-B and C areas, it was possible to 'transfer' these to this area. Thereafter, the accuracy of the point coordinates was tested. This was done by comparing the location of finds from the area that were mentioned with block-, house-, and room numbers in the published excavation report, with the point coordinate designations given to the same finds in the field register. Due to a systematic 'non-concordance' between the different systems of registration (the find spots did not correspond), a conscious and estimated shifting was done of the point coordinate system. This was done in order to gain a better concordance with the room designations of the finds. This is based on my assumption that the published horizontal orientation system (with blocks, houses and rooms) in this situation constitutes the most reliable, specified positions. The shifting concerns the following area as follows (see fig. 5.1.):

The area concerned:
DK-B, C: east-west-axis 840 – 440 (according to Dikshit)
north-south-axis 1280 – 1680 (according to Dikshit)
The shifting:
The east-west-axis has been shifted: 15 units (in a westerly direction)
The north-south-axis has been shifted: 40 units (in a northerly direction)
Example: the point coordinate 1680 x 440 (before the shifting) corresponds to 1640 x 455 (after the shifting)

(Ardeleanu-Jansen, et al. 1983:52). The same procedure could also be undertaken for the relevant sub-squares when for example relocating the finds of House VIII in block 3 in the HR area (Jansen 1984:54).

It is of importance to know that the point coordinates for most of the finds, including those of interest in this study, were rounded down or rounded up into even tens. This gives an elbowroom of 4-5 feet (1,2-1,5 metres) for each find. It is also worth pointing out that only those registrations which contain designations of point coordinates will be included in the below study on spatial distribution. Registrations designated in other ways as to horizontal location will be omitted.

While only the first season of excavation and some weeks of the following season are of importance here, this means that the published plan of the areas DK-B and C is somewhat misleading, since it shows the structures as they were visible after the much more extensive excavation of the following season (see fig. 5.1.). Searching through the plans of the Sindh Volumes (see below), I found a plan from the season of 1924-1925 showing the structures of block 11 and 12 as they apparently must have looked like after the first season's work (fig. 5.5.). Since I however was unable to find any plan showing all the structures that were laid bare during the first season of excavation, I marked out on the published plan all the point co-ordinates that were listed in the field register, to gain an apprehension of which parts were in focus for the first excavation. This showed that the first season's work apparently did not include blocks 13-16. Relatively much attention seemed to have been given blocks 11 and 12, while blocks 1, 9 and 10 appeared not to have been investigated that much. Also, by comparison between the published plan and a much earlier plan that was published in the ARASI (ARASI 1990/1926:Plate XLI), which shows the northern part of DK-C (blocks 2-9), it was possible to detect a certain displacement on the published plan (fig. 5.6.; compare with fig. 5.1.). This concerns the blocks 3, 4 and 5, which on the published plan have been somewhat 'turned' towards north-east.[100]

[100] This was held in mind during the analysis of the materials, but came in practice only to affect a small number of objects found just east of a small chamber in the north-eastern corner of room 5 in block 3. When correcting the displacement, these items came to originate from inside the small chamber instead.

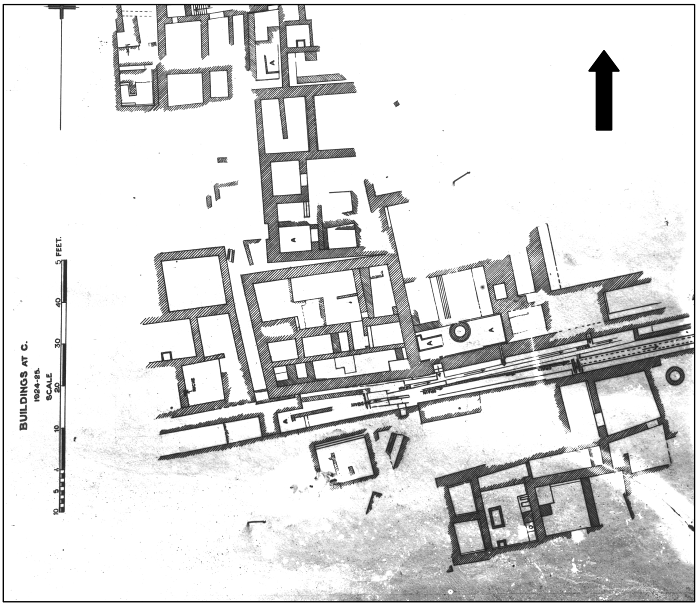


Fig. 5.5. Blocks 11 and 12 in the DK-C area after the field season 1924-25 (SV 16: P0R00109a). Courtesy of Prof. Jansen, RWTH Aachen University.

Vertical relocation of finds of DK-C

As was already pointed out, a vertical relocation is problematic since the excavators utilized relative depth measurements. I have nevertheless considered the vertical aspects in my study, although it has been kept separated from the horizontal relocations. The reason for my including vertical considerations will be clear in the course of the analysis. Suffice to say that it has to do with my searching for repetitive patterns of the spatial distribution, whereby three-dimensional considerations, as far as this is possible, are worth including. Due to the difficulties inherent in the vertical considerations, depth measurements mentioned for the finds have been converted into four different depth intervals. This will be explained in more detail in the following.

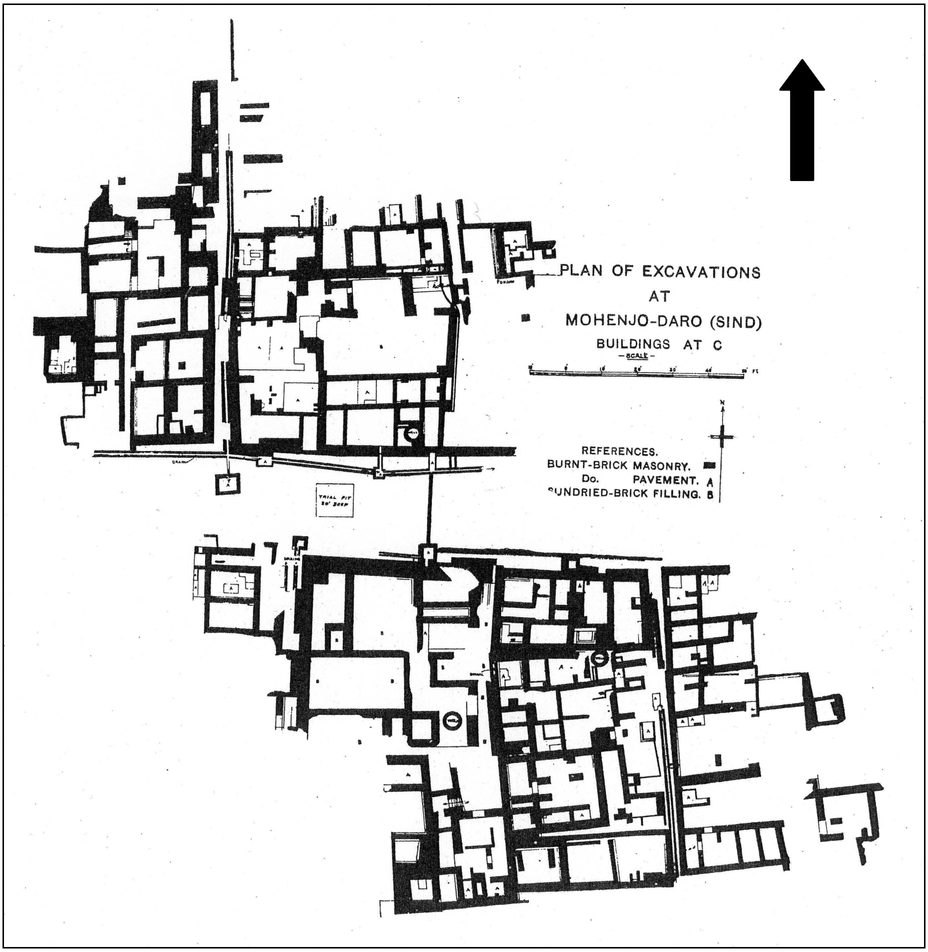


Fig. 5.6. The northern part of the DK-C area (from ARASI 1990/1926: Plate XLI).

Sources

Material finds

A large number of artefacts found during the large-scale excavations at Mohenjo-daro during the 1920s and 1930s have since then been dispersed at different museums around the world, some have been stolen or in other ways disappeared. A re-inventory of what remains of these kinds of finds at different museums would be desirable, but has for the moment not been possible. 'Concrete' finds, therefore, do not constitute the main source of materials for this work.

The field register for DK-C, 1924-1925

As mentioned previously, a number of field registers and other sorts of find recordings from the large-scale excavations of the 1920s and 1930s were re-discovered at Mohenjo-daro in the beginning of the 1980s by the "German Research Project Mohenjo-daro" (RWTH Aachen University). Photographed copies of these are today housed at the Lehr- und Forschungsgebiet Stadtbaugeschichte, Rheinisch-Westfälische Technische Hochschule Aachen (RWTH Aachen University). The photographed copy of the field register for the season of 1924-1925 and beginning of the season 1925-1926 at the DK-C area has constituted the main source for this work. This copy was generously put at my disposal by Professor Jansen at the mentioned department. The field register will henceforth be referred to as (FR 1924-25). It contains the following columns: Field Book no.; Date; Square (denoting horizontal orientation, mostly by point coordinates that have in most cases been rounded up or down into even tens); Level (denoting vertical orientation by depth below surface, using feet and inches); Description. The last column does not have any lengthy descriptions but contains in general only information regarding kind of object and kind of material. It is not to my knowledge whether the entries have been made by Dikshit, although this seems plausible since he was in charge of the excavation. Judging from the style of handwriting, all the entries seem to have been written by one and the same person (since this field register only covers the first season of excavation and the first weeks of the second season, there must logically have existed a second field register for this area as well).

The published excavation reports

The large-scale excavations at Mohenjo-daro during the 1920s and 1930s resulted in the publication of extensive excavation reports edited by Marshall (1931a) and Mackay (1938a), respectively. These have mainly been used to gain information about game-related materials. The two chapters specifically devoted to game-related finds, named *Games and Toys* in both reports (Mackay 1931c, 1938d), have been of particular concern for the work, as well as the pages

dealing with the area of DK-C (Mackay 1931a:242-250). The published list of finds from DK-C (Mackay 1931a:255ff), and the published plan of DK-B and C (Mackay 1931a:Plate LXII) has, as stated above, been helpful for the relocation of the finds. The comparative study and relocation of game-related finds from the area of DK-G has been based on the registered artefacts from this area that were selected for publication (Mackay 1938a).

The Sindh Volumes

The Sindh Volumes constitutes a comprehensive collection of photographs that was begun in 1902 and which was intended to document all kinds of monuments, artefacts found and excavations undertaken in the province of Sindh. The collection from the excavations in Mohenjo-daro comprises about 10 000 pictures. The 'Simla List' also belongs to this collection of photographs. It was published in 1940 and consists of the captions to the pictures. In the end of the 1970s, the "German Research Project Mohenjo-Daro" (RWTH Aachen University) began a copying work of the Sindh Volumes. It was then also discovered that the texts of the Simla List contained different kinds of errors. It emerged that, in certain cases, the field numbers referring to rows of photographed finds, for example, had been written in the reversed order (Ardeleanu-Jansen 1993:85f). More recently, the copies of the Sindh Volumes have been digitalized by the Center for Documentation and Conservation, RWTH Aachen University. The digitalized version was generously put at my disposal under the supervision of Professor Jansen at the Lehr- und Forschungsgebiet Stadtbaugeschichte, RWTH Aachen University. From this collection, pictures have been sorted out that show game-related finds from the DK-C area. In addition, a few photographs and plans from the time of the excavation in the area have been used for the sake of information and illustration. In the text, the Sindh Volumes are referred to as (SV disc number: image number).

The published field register for the HR-area

The field register for the HR-area was re-written and subsequently published by the "German Research Project Mohenjo-Daro" (RWTH Aachen University) (Jansen & Urban 1985a). It has been used in this work for the comparative study and relocation of game-related finds from the area.

Combined sources

Although the field register for the area of DK-C constitutes the main source, the combination of the different sources has been essential for this work. The published excavation reports furnish extensive information regarding game-related finds and have in this way acted as 'guides' when reading through the field register and sorting out relevant entries.[101] The information given in the field register is scarce, and since it was written during one of the first seasons of excavation, it is probable that 'standard terms' had not yet been developed for the different types of finds. As mentioned above, the published excavation reports are however for their part incomplete when it comes to listed finds (Jansen & Urban 1985b:VII), which makes the field register indispensable for an adequate relocation. The sorting of relevant finds came to a large part to be based on the game-related types of objects listed by Mackay. Photographs from the Sindh Volumes have in a few cases been helpful to further illustrate which kind of object that a specific registration refers to. Here, however, the problem with the reversed orders of the written field numbers has constituted an obstacle. The comparative studies of game-related materials from the HR and the DK-G areas both have their limitations as well. The relocation of finds of the DK-G area is far from adequate, since it is based on the un-complete list of finds of the published report. The relocation of game-related materials from the HR area, which is based on the field register for this area, includes all the listed finds of relevance (except for a number of finds with inadequate mentioning of horizontal orientation). Here, however, due to time-

[101] This will be dealt with in detail in the following.

and space-related limits of this work, no attention has been given to vertical differences.

The working procedure

The analysis will follow the working grid developed specifically for this work.[102] The grid will here be used in a more practical way, in order to test the empirical material (fig. 5.7.). As was previously described, the grid follows in concordance with the levels and stages of work of grounded theory as sketched by Guvå and Hylander (2003), consisting of four rows each made up of four compartments. It is to be read from left to right, beginning with the bottom left square. As will be recalled, the outline of the grid points however at the same time at the aim of trying out and testing *different* ways. Although partly building upon each other such as advocated by grounded theory, they work in individual directions as well. At the bottom of the grid, we distinguish the archaeological starting points that, partly overlapping, act as starting points for the four stages of work in accordance with previous reasoning.[103] These starting points are here however seen from a more practical point of view. Following from this, in the stage termed Collection of data, the starting point is constituted by the basic issue of why the material in question has been found in the way it has; and in which ways one can approach the question how it has been left behind (*The moment of being left behind*). In the stages named Coding and Comparison the search is focused on connections and concordances in the data that has been collected (*Relation-worlds*). Partly overlapping, the aim in the stages called Comparison and Conceptualisation is to lift forward particularly significant features (*Signifying principles*). As the reader can see, the archaeological starting points have here been translated into more concrete terms. 'The moment of being left behind' hence corresponds to the searching for and sorting out of *Spatial clusters* based on the main question of the row or level in question. 'Relation-worlds' concerns the distinguishing of *Material clusters* in the selected 'area'.

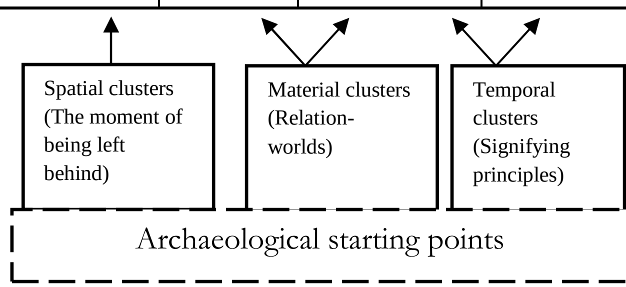
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[102] See Chapter 4.
[103] See Chapter 4.

'Signifying principles' is about the further encircling of these clusters by an emphasis on vertical aspects, here called *Temporal clusters* (the label concerns length or number of depth intervals, included to provide a three-dimensional picture of results as far as this is possible).

Fig. 5.7. The working grid, specifically developed for Chapter 5.

Stages of work → Levels of work ↓	Collection of data	Coding	Comparison	Conceptualisation
Level 3 – Generating theory				
Level 2 – Searching for pattern				
Level 1 – Formulating concepts				
Basement – Naming of indicators				



As can be seen in the figure, the first row or level is here called basement and is separated from the other rows with an extra bold line. This is coherent with the aim of establishing the analysis in what could be called prevailing excavation circumstances. In this level, the material is faced with details concerning the excavation of the area and the registration procedure of the finds. The analysis can with this be said to become twofold. It is partly properties of the finds,

partly details concerning the excavation and registration that are being analyzed. In this way, the first level constitutes a 'basement' upon which the following levels can be built. Due to the problematic situation in both the choice of material and the sources at hand, 'certain' versus 'uncertain' factors are sometimes brought to the fore in the analysis. The labels 'certain' or 'uncertain' do not in this case refer to whether a specific find is to be seen as game-related or not. Rather, 'certain' and 'uncertain' designations are assessed on grounds of the specific question of the particular level. Concrete entryways into the sources are searched for, at the same time as the particular directions of the different levels are continuously scrutinized. Following from this, the analysis will be presented in a twofold way in that the methodological steps will be described parallel to the presentation of results (in sectors called Coda).

In the bottommost level (the basement) and in level one, the different game-related types will be studied separately. Thereafter, concentrations of different kinds of game-related finds will be analyzed. From level one onwards, only selected parts of the material will be presented. This is partly due to time- and space-related limits, but it also results from the aim of lifting forward the formulated inquiry in a more clear way. Beginning with this level, the stages of work Coding and Comparison will be put together into one stage, and a sector called Correlation will precede every Coda in order to summarize the examinations. As mentioned, the DK-C area constitutes the main area of the analysis. In level three, however, the examination widens as a comparative analysis will be made on the game-related materials from the HR and the DK-G areas.

Percentages with decimals have been rounded up or rounded down to whole numbers, as the prime point is not to gain 'exact' information but rather to search for repetitive patterns. Concerning the vertical aspects, that is, the designations on depth, the problems inherent in these must naturally be attended to. They have nevertheless been included in the analysis as they, as stated above, can contribute in the searching for patterns. Due to their problematic appearance, vertical considerations have been placed separately and at the end of each level (whereby the stage of work termed Comparison has been divided up in two, separated parts). The material will be analyzed according to the mentioned sources at hand.

Any interpretations of the results will however not be undertaken in this chapter.

5.2. Defining game-related types on the basis of field register- and excavation conditions: naming of indicators (Basement)

The first part of the analysis will concentrate on how the field register, concerning the area of DK-C in the eastern part of Mohenjo-daro and belonging to the field season 1924-1925 and beginning of field season 1925-1926, handles game-related objects. The terminology will be studied, as well as the correlation between the entries of the field register and the information given by the published excavation reports. This will be done in order to gain an insight into the reliability of the sources. More concretely, the aim is to try to define game-related types and to see whether their spatial distribution not only results from excavational circumstances. The field register comprises 3294 registrations in total.[104] The question now is whether it includes finds of a game-related character and whether it is possible to sort out and spatially study such kind of finds:

- Do game-related objects exist?

5.2.1. Collection of data Starting from Spatial clusters →

The collection of data will consist of two basic undertakings. The first and largest one (a) concerns the entries of the field register and the question whether game-related find registrations can be distinguished and sorted into types. This will be based on the mainly game-related

[104] It must be observed that since the registrations are not necessarily referring to one, single artefact but may in a number of cases apply to two, three or even more objects – recurrently an indefinite number of such – the actual number of *finds* is a different matter, which would increase the number considerably.

information given in the published excavation reports. To a certain part, the Sindh Volumes will be used as support as well[105]:

- To which degree do game-related objects exist? Are there any uncertainties and, if so, could such be traced to the manner of registration and/or the reading of this?

The second way of collecting data (b) will consist of a study of the spatial distribution of the relevant finds and the question whether the distribution patterns are to be seen as a consequence of the way the site was excavated:

- If not scattered at random, which patterns are visible in the spatial distribution of the game-related objects, and are these to be connected to excavational circumstances?

a. Defining game-related types

The search for game-related entries in the field register is undertaken on the basis of the game-related information provided in the published excavation reports. Based on these reports, a first, preliminary sorting results roughly speaking in three different kinds of possible, game-related registrations in the field register. Firstly registrations that can be termed as traditional, game-related classifications, such as ‘chessman’ and ‘dice’. Secondly, descriptions of a more unclear or neutral character, such as ‘cone’. Thirdly, registrations of unconventional nature like ‘ivory piece with incisions’. With the first sorting, a number of more or less dubious description categories are dismissed, such as designations that only mention a specific material followed by ‘piece’ (like ‘ivory piece’), as well as descriptions of an overall too unclear character. The latter refers to descriptions that do not provide sufficient information as to what kind of object they are referring to.[106]

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[105] Other kinds of sources will to a small part be included, but only as footnotes.

[106] This dismissal also applies to all kinds of animal- or human figurines, inlays, weights and other instances where a possible, game-related purpose or function of the object or objects in question appeared too far away (despite the fact that basically all

Below, this 're-discovering' of objects is accounted for in detail.[107] Every type is individually presented. The presentations begin by listing which kinds of designations the type in question encompasses. Thereafter follows a defining of the objects by connecting them to corresponding classifications in the excavation reports. Here, the question is sometimes also touched upon whether some designations appear as more 'certain' or 'uncertain', respectively. While the definitions are resting on the mainly game-related descriptions of the published excavation reports, this means in more concrete words that they to a large part rest on the ideas and descriptions by Mackay. In a few cases, the information provided by the Sindh Volumes plays a role as well.

Gamesmen

…they are found in considerable numbers…
(Mackay 1938d:570)

Presentation of objects:

In the field register, the following designations appear: 'chessman'; 'chess man'; 'chess piece'; 'chess'. With a few exceptions, the objects have been presented along with the particular material of which they are made. A slight majority are described as being made from black marble or black stone (with a few cases just mentioned as "black chessman"). The rest are mainly of terracotta or stone (the latter without specification of which kind). A few examples appear of marble and of shell. Five designations lack material definition.

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sorts of objects, regardless material, shape, initial purpose etc., could be (re)used as game-related utensil).

[107] In the game-related information in the published excavation reports, some further game-related types appear that will not be considered for DK-C for the reason that no specimens of these types could be found mentioned in the field register. This applies among other things to pottery discs (rubbed pieces of potsherd), which according to Mackay were used as gamesmen, as well as to game boards scratched in bricks (Mackay 1931c:559, 1938d:574ff).

Additional information is absent save for one entry noted as "green chess man piece" (FR 1924-25).

Presentation of corresponding objects in the published excavation reports:

1. Gamesmen

We note that the designation 'chessman' is more or less absent in the excavation reports (in particular concerning the game-related descriptions). The *Gamesman*, however, is given plenty of space, especially in the later report where gamesmen are even tabulated as to measurements, material, level and location. In both reports, 'gamesmen' are handled in the chapters named *Games and Toys*.[108] Taken as a whole, the gamesmen are said to "/…/occur at all levels/…/", while being "/…/found in considerable numbers, many more having been unearthed than it has been possible to illustrate" (Mackay 1938d:570). In the later report, they have been subdivided into groups according to shape.

Size, material and appearance: The tabulated items are 0,4-1,95 inches in height (1,02-4,95 cm) and 0,5-1,55 inches in diameter (1,27-3,94 cm) (Mackay 1938d:576ff). According to the first report, the diversity of materials of the gamesmen is not great and consist, in descending order, of faience, pottery, shell, marble, agate, slate and, lastly, steatite. The second report however adds such materials as ivory, bone, paste, bronze, alabaster, chalcedony and limestone, as well as some stone "/…/of unusual materials/…/", like lapis lazuli and jade (Mackay 1931c:557, 1938d:571ff). The gamesmen display a great variety of shape, colour and finish. As Mackay deliberately states, those selected for individual presentations are only those specimens that are of particular interest. The more numerous shape-groups constitute *Round topped cones*; *Pointed cones*; *Straight-sided cones with definite head*; *Cones with incurved sides*; *Regular tetrahedra*.[109] What will be described

[108] In the first report, game utensils are also shortly mentioned in a summarizing chapter written by Marshall (1931e).

[109] The shape-groups of less numerous contents consist of *Four-sided pyramidal gamesmen*; *Flat triangular gamesmen*; *Bobbin-shaped gamesmen*; *Cylindrical with flat top and*

here in more detail are the third and fourth groups.[110] The third group is mentioned to consist of examples having a 'head' on a grooved neck (fig. 5.8.). Some of the gamesmen of this group are described as having ornamented bodies, such as vertically incised chevrons on two of the presented objects; or an inlaid band consisting of yellow paste on another specimen made of glazed faience. The fourth group is said to refer to the most common type (fig. 5.9.). As the name suggests, this type has incurved sides. The various examples are made of different kinds of material and are given different appearances as to slip, colour, and ornamentations (Mackay 1938d:571f). The marked variety can be further pronounced with some examples of the earlier report. One example is coloured in white and red with the supposed intention, we are told, of resembling decorated carnelian, while another "/…/is more elaborate still; it is painted in red and black on a cream ground" (Mackay 1931c:558). A number of specimens of both the third and fourth groups have a small vertical hole in their base (Mackay 1938d:571f and footnote 1). The gamesmen made of pottery and faience are according to the earlier report made in a mould. In the same report, it is stated that the majority of gamesmen are remarkably well made (Mackay 1931c:558).



Fig. 5.8. Example of a 'straight-sided cone with definite head' (from Mackay 1938a:Plate CXLII.59).



Fig. 5.9. Example of a 'cone with incurved sides' (from Mackay 1938a:Plate CXL.10).

<u>Intercultural resemblances and suggestions for interpretations:</u> Mackay points at a number of intercultural resemblances that can be seen in the gamesmen. He mentions for example specific gamesmen from ancient Egypt, said to belong to a particular kind of game for two players (Mackay 1938d:572 footnote 2). In the first report, besides

base; *Cubical gamesmen*; *Gamesmen (?)*. Some of these groups consist only of one or two specimens (Mackay 1938d:573f).

[110] More information on the other types will be given below, in connection with the types 'cones' and 'tetrahedra', respectively.

the writings by Mackay, the term 'gamesman' is found to be used by other authors as well. However, we find in particular with the gamesmen recurrently an inconsistency of definitions. An object mentioned in the chapter on games and toys as 'gamesman' may at the same time, when appearing for example in the chapter that focuses on the particular area of which the object in question belongs, be found to have been given a totally different label. Marshall most clearly expresses such hesitation as he, in a footnote to the section of the gamesmen, states that "/…/[i]t is by no means certain that these objects were gamesmen. The larger ones could certainly not have been such, as they are much too heavy" (Marshall in Mackay 1931c:557 footnote 4). In connection with a discussion concerning possible worship of baetylic and phallic stones at Mohenjo-daro, Marshall suggests even the smaller examples (that is, the 'gamesmen') to be seen within this line of thought, having functioned as amulets carried on the person (Marshall 1931f:58ff).[111] However, this is not to say that he denies their possible role as gamesmen. Emphasizing the world-wide use of baetylic and phallic objects as "luck-bringing talismans", Marshall in contrast states that "/…/nothing would be more natural than that the pieces used in games of chance or skill should be fashioned after the same model and thus bring luck to the players/…/". He adds though that this is nothing more than assumptions, "/…/since at present we have no proof that any of these objects were used for games, though their resemblance to Egyptian gamesmen undoubtedly warrants that inference" (Marshall 1931f:61). As if illustrating this doubtfulness/possible multifunction, the sub-heading given to the small section dealing with the gamesmen in question is in fact in the earlier report labelled "Gamesmen or Amulets" (Mackay 1931c:557).

2. <u>Pendants</u>

In addition, we find in the reports a kind of stone object that along with other items goes under the classifications *Stone Pendants (?)* and

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[111] One of the items proposed as such (that is, a mini-sized version of a phallic stone) is for example the above mentioned object supposed to resemble decorated carnelian, which is of the type with incurved sides (Marshall 1931f:Plate XIII.3).

Pendants (fig. 5.10.). This is described in the chapters named *Personal ornaments*, respectively (Mackay 1931e, 1938e). Mackay states pendants on the whole to be strikingly rare at Mohenjo-daro. These particular objects, however, are stressed as "/…/now numerous/…/" (Mackay 1938e:522). They have been unearthed at all levels but particularly from later strata.



Fig. 5.10. Example of a 'stone pendant'/ 'pendant' (from Mackay 1938a:Plate CXXXV.8).

Size, material and appearance: Their heights show with 0,45-1,1 inches little variation (1,14-2,79 cm). The single object with a size over 1 inch is said to constitute an exception from the rest (Mackay 1938e:522). The hard black stone of which they are made was concluded to be mainly composed of hornblende, said to be best termed amphibolites. Apparently handed to an expert, Edwin Pascoe (the director of the Geological Survey of India) suggested, according to Mackay, that the black colour was artificially derived from heating in oil or the like (Mackay 1931e:526 and footnote 2). They all show the same, somewhat conical shape, with a flat base and an either slightly rounded or flat top that is distinguished from the body by a cut, horizontal groove. All specimens are well polished and the groove very carefully made. The latter is thought to have been used for a thread or the like, of which however no traces have been found (Mackay 1938e:522).

Intercultural resemblances and suggestions for interpretations: The classification of these objects as pendants is somewhat doubted. However, Mackay simultaneously objects to the thought of them as either gamesmen or weights among other reasons due to the groove, which in that case would have been without purpose (Mackay 1938e:522).[112]

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[112] These items are described by Kenoyer (2000:123) as 'cylindrical amulet' and mentioned to have been found with adult females in the cemetery at Harappa. They seem to have been worn around the throat.

Comments on correspondence:

The ‘chessmen’ found in the field register do apparently not refer to any chessmen in a literal sense, that is, as gamesmen used explicitly for the game of chess. It would for several reasons be a far cry to draw associations to this game.[113] As seen, this is apparently not an issue either for Marshall or for Mackay. Hence, we can se ’chessman’ as an expression for a confusion of terms, which should not be all too unusual when handling game-related objects. The term may in that case be seen as representing the circumstance that at this early period of the excavations at Mohenjo-daro, ‘standard terms’ of the finds had not yet been fully developed and acknowledged. In light of the different ways of labelling these kinds of objects, it is worth noting that the author of the field register did use the term ‘chessman’ so consequently.

The field register also contains a number of designations called ‘cones’ (see below). The ‘chessmen’ may thus be presumed to be in some ways distinct from these. Unfortunately, neither among the photographs of the Sindh Volumes, nor among the illustrated gamesmen of the published report have any of the ‘chessmen’ from the field register in question been found to be included. The distinction is obviously not to be searched for in material differences, since among both kinds of designations various materials are represented. We can assume that at least the main part of the ‘chessmen’ should fit into one, or some, of the listed shape-groups. If we at the same time suppose them to differ from those designated as ‘cones’, we could suggest them to be of the group with incurved sides, in particular since objects of this type were found in plenty. Possibly, we may imagine some ‘straight-sided cones with definite head’ to be represented as well.

Among the gamesmen selected for publication in the earlier

[113] One reason for not regarding the objects as *chess*men is seen in the overall difficult task to say anything about specific games due to the general descriptions and appearance of the objects in question. If really used for ‘board games’, they may have been used for a large variety of such. Another reason concerns the markedly distant period of time of which we are talking about. According to chess-historians, the game chess has a totally different and much later time span for its development (oral com., Eder and the late Vasantha May 2008).

report there is one specimen of black marble (Mackay 1931c:557). However, in the same report 'marble' is placed fourth in the list of materials that were used, and 'black stone' or anything like it is not mentioned at all. I would therefore suggest that among the 'chessmen' said to be made of black marble/black stone – since these are in slight majority – some examples of the 'stone pendants'/'pendants' mentioned above may be found as well. Although Mackay expresses doubts as to considering them as gamesmen, they would perhaps from someone else's view as easily be regarded as gamesmen (that is, 'chessmen'), due to their rather gamesman-like shape.[114] Similarly, their unusual material could probably just as easily be classified as black stone or even black marble. In this context, it is of interest to note that no designation termed 'pendant' has been found in the field register.

This said, we cannot go much further concerning these objects. The pronounced variation in appearance apparently attributed to these items is not within our reach. Due to the problematic associations joined with the term 'chessman', this group of designations will henceforth be called 'gamesmen'. Their total number amounts to 30 registrations.

Cones

A striking feature of the excavations at Mohenjo-daro…
(Mackay 1931f:476)

Presentation of objects:

In the field register, the following designation appears: 'cone'. Most of the entries are composed of the particular material in question followed by cone, like "terracotta cone". An overwhelming majority are of terracotta. In addition, two specimens are made of stone, and one each of flint, calcium and ivory. Three registrations are without

[114] These kinds of objects are indeed labelled as gamesmen by Vats in his report on his excavations at the site of Harappa (Vats 1940a:454f) (see Chapter 3).

material definition. Additional information are seen with a few: "fractum of a cone with incision"; "rough cone slightly damaged"; "stone cone implement"; "terracotta cone with two white bands"; and "ivory cone with carvings" (FR 1924-25).

Presentation of corresponding objects in the published excavation reports:

1. Cones suggested as gamesmen

Categories of cone objects are found in the sub-sections of the two reports that concern 'gamesmen' in the chapters named *Games and Toys* (Mackay 1931c, 1938d). In the earlier report, different kinds of cones are presented indifferently under the sub-heading "Gamesmen or Amulets" (Mackay 1931c:557ff). Cones of the round topped type are in addition found to be exclusively presented under the sub-heading *Small Cones with Rounded Tops* (with the additional side-heading "Gamesmen (?)") in the chapter labelled *Household Objects, Tools, and Implements* (Mackay 1931f:478). The various 'gamesmen' have in general been emphasized as numerous, although the most common shape is said to be the type with incurved sides that was described above. The 'small cones with rounded tops' which are presented separately in the earlier report, however, are in contrast maintained as small in number (Mackay 1931f:478).

Size, material and appearance: as mentioned above, the 'gamesmen' are on the whole quite varied in size. They likewise appear to be made of a great range of materials, although we remember that in the first report the objects were noted to display little variation in material. Faience is here mentioned as the most common type of material. The separately presented 'small cones with rounded tops' are said to be made of shell and pottery. In the later report, we find cones in the groups *Round topped cones*; *Pointed cones*; *Straight-sided cones with definite head*; *Cones with incurved sides* (Mackay 1938d:571). Of interest here will be the first three groups.[115] Examples of the first group that

[115] As the reader will recognize, the third group, 'Straight-sided cones with definite head', was also suggested for the previous type of object, the 'gamesmen'. This group

are on display in the later report, the 'round topped cones', are made of stone, pottery, faience and shell (fig. 5.11.). It is noted that this group contain specimens made of unusual stone (like jade and lapis lazuli). The 'round topped cones' have as the name suggests a rounded top. The examples seem mainly to have slightly tapering sides. Specimens of this group rarely have a vertical hole in the base. The two examples of 'pointed cones' have a pointed top and a relatively wide base (fig. 5.12.).

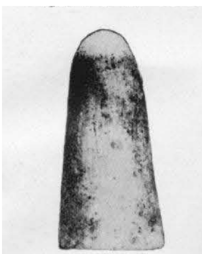


Fig. 5.11. Example of a 'round topped cone' (from Mackay 1938a:Plate CXL.1).



Fig. 5.12. Example of a 'pointed cone' (from Mackay 1938a:Plate CXL.2).

The 'straight-sided cones with definite head' exhibit a grooved neck, as was mentioned above. As we recall, specimens of the third group are said to have various ornamentations, as well as in a number of cases a small, vertical hole in the base. A shell gamesman of the first group is described as decorated with three, deeply cut grooves. One of the examples of the second group is said to be decorated with a band with inlaid paste in a contrasting colour. Here, we may also mention two examples noted among the 'gamesmen' of the earlier report, which following the later report would have fallen into the first group. One of these displays a trefoil design, while the other is coloured in white and red supposedly to resemble decorated carnelian (fig. 5.13.). The 'small cones with rounded tops' are said to be "/.../very carefully made/.../" (Mackay 1931c:557f, 1931f:478, 1938d:571).

is mentioned for both 'gamesmen' and 'cones' since it is difficult to distinguish behind which type of designation it may possibly hide.

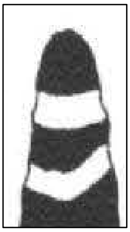


Fig. 5.13. A cone of the round topped type coloured in white and red (from Marshall 1931a:Plate CLV.24).

Intercultural resemblances and suggestions for interpretations: Resemblances are lifted forward by Mackay between the 'round topped cones' and similar, supposed game-related objects of sandstone from the site of Jemdet Nasr, Iraq (Mackay 1938d:570 footnote 10).[116] At the same time, we may recall the somewhat inconsequent ways of labelling these objects as discussed above, as well as the suggestion expressed by Marshall of primarily viewing the items as amulets or mini-sized, phallic- or baetylic stones (the latter would thus refer to the 'round topped cones' and the 'pointed cones') (see e.g. Marshall 1931f:Plate XIII.4-6).

2. Large cones

According to Marshall, some cone-objects cannot have been used as gamesmen, as they "/.../are much too heavy for that purpose" (Marshall 1931f:59). Information on larger-sized cones is given in the chapters on household objects in the two excavation reports, respectively. Much data is also provided in the chapter on religion in the earlier report (Mackay 1931f, 1938f; Marshall 1931f). Nine examples of these kinds of cones are mentioned to have been found during the recent work (Mackay 1938f:407). They are named *Large-Cones* in the later report, and *Conical stones*, as well as *Conical Stones with Heads* in the earlier report (Mackay 1931f:476, 1938f:407). In the earlier report, large-sized cones are moreover suggested by Marshall as phallic and baetylic stones (Marshall 1931f:59f).

Size, material and appearance: In the earlier report, the cones interpreted as phallic stones are said to reach up to about a foot in height (0,3 m), while the baetylic examples may sometimes be as high

[116] Along with other types of objects, these are said to have been found all over the site of Jemdet Nasr (Mackay 1931i:277).

as 2-3 feet (0,6-0,9 m). They are mentioned to be generally of stone (such as limestone or alabaster). Among the nine examples mentioned in the later report, seven cones are in stone and two in pottery. They differ slightly in shape and finish. In the earlier report, Mackay suggests that some of the cones may have served a cultic purpose due to their markedly polished tops. The 'large-cones' of the later report are proposed by Mackay either as grinders, or as possible (unfinished) weights or *lingas*, among other reasons due to their different stages of finish (Mackay 1931f:476, 1938f:407ff; Marshall 1931f:58ff).

<u>Intercultural resemblances and suggestions for interpretations:</u> The possible worship of stones is compared by Marshall with similar practices in among other places ancient and modern India and Western Asia (Marshall 1931f:58ff).

3. <u>Small Cones with Pointed Tops/Small Cones</u>

A third category of cones is named *Small Cones with Pointed Tops* and *Small Cones*, and described in the two chapters on household objects (Mackay 1931f:476ff, 1938f:409f). They are noted to appear at all levels and are said to be remarkably frequent: "/…/[a] striking feature of the excavations at Mohenjo-daro is the great number of small cones that have been found/…/" (Mackay 1931f:476).[117]

<u>Size, material and appearance:</u> The examples selected for publication are 1,2-4 inches in height (3,05-10,16 cm). They are mostly made of pottery, but also of shell. Single examples of lead and stone, respectively, have been listed as well. All are pointed at their upper ends. The ones of pottery are described as baked so hard that they have become almost vitrified. According to the earlier report, the cones can be divided into three main groups of shape (no group is confined to a single type of material). The 'carrot' type constitutes one of the most common forms (fig. 5.14). As its name suggests, it is high and narrow in shape with a small projection at its base. The second type is also common and described as 'flat-based'. This is either high

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[117] In the report on the excavations at Jemdet Nasr, Mackay states that these kinds of cones "/…/at Mohenjo-Daro and Harappa in India /.../ were found in very large quantities/…/" (Mackay 1931i:277).

and narrow in shape, or short and thick. The third type is mentioned as common as well and has a rounded base (fig. 5.15). This is in general of a short and thick shape. Besides these main types, some examples of unusual appearance have been included, such as specimens with differently formed, receding bases. A great number of pottery cones of the 'carrot' type and of the wide-based type are noted to be entirely coated with a brown or black wash. The 'carrot' type is described as occasionally ornamented with pits grouped in spiral lines at the base (in no case displaying remains of filling).



Fig. 5.14. Example of a 'small cone with pointed top'/'small cone' of the carrot type (from Mackay 1938a:Plate CIX.33).



Fig. 5.15. Example of a 'small cone with pointed top'/'small cone' of the type with rounded base (from Mackay 1931a:Plate CXXXIV.14).

A few examples of the flat-based types show ornamentation in the form of being scored at the base with either spiral lines or three to six horizontal lines. The round-based cones are sometimes also scored at the base with a spiral line. Unique specimens include for example a pottery cone displaying a group of pictographs on one side at its base. Among the listed examples, some are described as rough, others as smoothly finished. As to wear, almost all the pottery cones have been found with the point broken (Mackay 1931f:476ff, 1938f:409f and footnote 2).

<u>Intercultural resemblances and suggestions for interpretations:</u> According to Mackay, a variety of cones of the type described here, the largest noted as 6 inches in height (15,24 cm), have been found at various sites outside the Indus valley, such as at Jemdet Nasr, Ur, Warka, Nippur and Khorsabad. They are mentioned to occur particularly in the earliest periods of the Sumerian civilization. The cones from Jemdet Nasr, of pottery, are noted to resemble the ones from Mohenjo-daro very much (Mackay 1931f:478, 1938f:409 and

footnote 3).[118] In these cones, Mackay in fact claims a "definite link" to be seen between "/…/the cultures of the Indus valley and of Sumer" (Mackay 1938f:409).[119] One suggestion is that they may have been phallic objects, another that they were used in some kind of game in which they were supposed to be thrown with the point first (one specimen is proposed as a possible gamesman) (Mackay 1931f:478, 1938f:409f).[120] [121]

Comments on correspondence:

One of the 'cones' of the field register, the one labelled "terracotta cone with two white bands", is found to be among those selected for publication in the earlier excavation report. It is the same object as the one mentioned above, with red and white colour that is proposed by Mackay to resemble decorated carnelian (see fig. 5.13.). This means that we have both a description and an illustration of one of the finds in question. It may thus constitute a kind of 'evidence' that strengthens our suggestions as to what kinds of objects this designation may stand for.[122] We can presume that the majority of the finds do not represent large-sized cones, since we are told that these are in general made of stone, while most of the designations of the field register concern terracotta examples. Due to the frequency of this material, we can suggest that what is mainly represented among the

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[118] The ones from Jemdet Nasr are though noted to be of a markedly irregular shape (Mackay 1931i:277).

[119] Their use, however, is stated "an enigma" (Mackay 1931i:277).

[120] The idea that these cones should have been used for decorating walls, as according to Mackay has among other ideas been proposed for cones from Ur, is rejected by him among other reasons on grounds of the small size of the cones from Mohenjo-daro. Nor could they according to him have been used as borers (Mackay 1931f:478, 1931i:277, 1938f:409).

[121] As mentioned earlier, Professor Kenoyer has kindly drawn my attention to the fact that these cones may have been used as instruments for the construction of buildings (oral com., Kenoyer July 2010).

[122] Another cone of the field register, the single example made of flint, appears on one of the photographs of the Sindh Volumes. The picture shows clearly that this object cannot constitute a possible, game-related item of the kind we are looking for, as it is all too large. This designation is therefore removed from the list of cones.

registrations is the last category of cone-objects, the ‘small cones with pointed tops’/‘small cones’. One of the reasons may be the asserted frequency of these cones. Another may be the statement of the earlier report that the cones with rounded tops (that is, the first group as defined by the later report) occur in small numbers. The cones with rounded tops seem furthermore to refer to a distinct number of cones of other material than terracotta, such as a variety of stone.[123] It is worth noting that the cone which is illustrated is one of the few examples of ‘cones’ of the field register that is actually given additional information. Are accordingly most of the finds of this type to be understood as of plain appearances? The total number of ‘cones’ amounts to 56 registrations.

Tetrahedra

…numerous specimens have been found…
(Mackay 1938d:572)

Presentation of objects:

In the field register, the following designation appears: ‘triangular’ or similar. The formulation ‘triangular’ has been used four times (in one case as ‘triangular object’). In three cases, these have been accompanied by a specification of what material the object was made of. Other, odd entries consist of one ‘triangle’ as well as one ‘pyramid shaped’. Two specimens are of shell and one each of lime, calcium and ivory. One item lacks material definition. The ‘pyramid shaped’ is the only example with additional information. The complete entry is: “ivory piece pyramid shaped and ornamented” (FR 1924-25).

[123] This argument is however at the same time somewhat speculative. Examples of pottery, perhaps of quite ordinary appearances, may not have been among those selected for publication.

Presentation of corresponding objects in the published excavation reports:

The *Regular Tetrahedra* is listed as the fifth of the groups of gamesmen presented in the chapter *Games and Toys* in the later excavation report. In the chapter with the same name in the earlier report, this type of objects are defined as *Tetrahedral forms* (Mackay 1931c:559, 1938d:572). In the later report, they are mentioned as found in large numbers and deriving from all levels.



Fig. 5.16. Example of a 'regular tetrahedron' of white limestone (from Marshall 1931a:Plate CLIII.41).

Size, material and appearance: Each side of the two specimens selected for presentation in the earlier report has the measures 0,94 and 0,75 inches, respectively (2,39 and 1,91 cm). The objects sorted out in the later report are of glazed paste with one exception, which is of cast bronze. One of the two examples in the earlier report is of white limestone (we are informed that none has been found in stone) (fig. 5.16.). As the name suggests, all four sides of the items are equal in size.[124] All objects are undecorated. The ones of glazed paste, all noted as carefully made, are presumed to have been green or blue in colour (Mackay 1931c:559, 1938d:572f).

Intercultural resemblances and suggestions for interpretations: Similar items have among others been found at Sumerian sites such as Ur and Kish, where they are mentioned as noticeably early, belonging to the pre-Sargonic period. These are however noted to have rounded corners marked with small pieces of inlay, as well as mentioned as commonly of stone.[125] [126] They are thought to have been gamesmen. Mackay reflects on the obvious popularity of these objects, since, as he

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[124] Some are noted as a bit higher than wide, but, as Mackay assumes, this could have 'accidental' reasons (Mackay 1938d:572).

[125] For more on these objects and the suggestion of them as having served as dice, see Chapter 3.

[126] The specimens from Mohenjo-daro are also compared with similar objects made of slate from Jemdet Nasr. The latter however display a somewhat different, four-sided, pyramidal shape on a square base (Mackay 1931i:277f).

states, they provide a slight difficulty in being picked up. He suggests them as having been pushed with the finger instead (Mackay 1938d:572).

Comments on correspondence:

One of the designated finds from the field register is among those selected for presentation and illustration in the earlier report. This refers to the find labelled as "calcium triangular". In the report, this object is the one of white limestone (see fig. 5.16). None of the listed finds are noted to be of glazed paste. As shown by the illustrated example, however, the opinion as to material may obviously differ. Besides, we do not know at the moment if specimens of glazed paste are particularly common. We note that none are mentioned to be of stone, which may contribute to the suggestion that they represent the 'tetrahedra'. The total number of 'tetrahedra' amounts to 6 registrations.

Balls

…balls of [shell]… are now familiar objects…
(Mackay 1938d:566)

Round pottery rattles…are well known at Mohenjo-daro.
(Mackay 1931c:551)

Presentation of objects:

In the field register, the following designations appear: 'ball'; 'sphere'; 'rattle' (due to their similarity with the balls, I have chosen to put rattles into the same sub-group). Most of the entries of balls in the field register are composed of the particular material in question, followed by 'ball', like "terracotta ball" or "stone ball". The most common material is terracotta, but a number of designations re-presenting "stone ball" are also present as well as a few examples of shell, marble and copper. Decidedly few registrations offer additional

information. Variations of singular appearances include for example "terracotta toy ball" or "tiny white ball". Single cases present a ball as either 'polished', 'irregular', 'solid', 'with spots' or 'small'. Two finds are described as 'sphere'; one "shell sphere" and one "incised sphere". Most of the rattles are labelled "terracotta rattle ball" or similar. Except for one case that lacks reference to material, all rattles are described as made of terracotta. Only in one case there is additional information, a rattle being described as 'ornamented' (FR 1924-25).

Presentation of corresponding objects in the published excavation reports:

1. Balls and marbles

Balls and *marbles* are treated in both of the two chapters *Games and Toys* (Mackay 1931c, 1938d). According to Mackay, these artefacts were "/.../clearly not very common/.../, despite the fact that "/.../a good selection of [them] has been found at Mohenjo-daro and at all levels/.../" (Mackay 1938d:565); whereas balls made from shell are specifically described as "/.../now familiar objects, though only found in the higher levels/.../" (Mackay 1938d:566).

Size, material and appearance: The balls selected for description range from 0,48 to 1,75 inches in diameter (1,22-4,45 cm). Those of the smallest size are labelled as 'marbles'. Larger balls have not been found. Both balls and marbles are described as made from pottery, a variety of stone (such as limestone, agate, alabaster or chert[127]), faience and paste. Some balls, but none of the smaller ones, are made of shell. All balls, including the examples of pottery, appear to be solid (Mackay 1931c:552f, 1938d:565ff). Those of harder stone are for most part "/…/beautifully shaped and polished/…/" (Mackay 1938d:565). The shell balls are described as always exhibiting the same, carefully carved and finished pattern of regularly placed, concentric double-circles. In addition these are recurrently cut in relief, and, at least in

[127] Mackay states that the only possible way of making these kinds of stone marbles are to roll them continuously in water mixed with some sort of abrasive, for which, for getting a successful result, homogeneous stone is preferable (Mackay 1931c:553).

one case, thought to have been filled in with a coloured paste. Relatively few pottery balls appear to have been selected for presentation (fig. 5.17.). One of these balls is described as having semicircular incisions while another has regularly placed, incised circles. According to Mackay, this is most probably to be seen as an imitation of the pattern of the shell balls. The shell balls picked out for presentation are said to be "/…/polished by much wear" (Mackay 1931c:552f, 1938d:565ff).



Fig. 5.17. Example of a 'ball' in pottery (from Mackay 1938a:Plate CVI.15).

Intercultural resemblances and suggestions for interpretations: Comparisons are drawn to finds of marbles from among other places Sumer and Egypt. In Egypt, marbles mostly appear in pre-dynastic graves and are as in Mohenjo-daro made from different kinds of hard stone. In contrast to the marbles from Mohenjo-daro however, they appear to have been made with less care. Marbles of pink limestone and slate have also been found at Jemdet Nasr (Mackay 1931c:553, 1938d:565). The balls and marbles are suggested by Mackay to have been used in ways similar to modern marble games or for hitting mini-sized skittles and the like. As concerns the finest examples, however, Mackay expresses some doubt as to their use in games (that is, used for rolling purposes). In the earlier report, the shell balls are suggested as some kind of toys. In the later report, Mackay proposes them as probably not intended for any ordinary purpose due to the carefulness of their carving and the constancy of their pattern. Small balls of baked clay are suggested either to be seen as marbles, or as sling pellets (Mackay 1931c:552, 1938d:565f).

2. Rattles

Rattles have received their own subsections within the two chapters on games and toys (Mackay 1931c; 1938d). They are said to be numerous and to appear at all levels (Mackay 1938d:558).



Fig. 5.18. Example of a ‘rattle’ (from Marshall 1931a:Plate CLIII.11).

Size, material and appearance: The sizes vary slightly. The examples included in the reports range between 1,4-2,6 inches in diameter (3,56-6,6 cm). With one exception, the rattles are said to be generally made of the same kind of clay as that utilized for ordinary pottery, a light red or drab coloured ware (fig. 5.18.). They are hand-made, and though “/.../invariably well finished/.../”, stated as simple in fashion and noticeably similar in appearance: “/.../a hollow ball of baked clay with one or more pellets inside.” By examining a few, the pellets are found to count two or three in number. They are made of clay and are rough in shape. The walls of the rattles are in general “/.../substantial, but not so thick as to make the rattle heavy or to dull the sound” (Mackay 1931c:551, 1938d:558). Some rattles are plain while others are adorned with thick, more or less evenly painted lines in red. These are either horizontal or vertical or painted in a cross pattern. On some specimens, the painted lines are arranged at right angles to each other starting from each half of the rattle (Mackay 1931c:551, 1938d:558f).[128]

Intercultural resemblances and suggestions for interpretations: According to Mackay there are no rattles at Mohenjo-daro in other shapes, such as in the form of animals, despite the fact that these are frequent at ancient Sumerian sites. [129] [130] At the same time, as Mackay continues, no rattles of similarly simple shape to the ones found at

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[128] A number of rattles lack a coating of slip, which according to Mackay may be due to their mode of manufacture. The clay, as he suggests, was probably wrapped around a core of some combustible sort, into which the clay pellets were placed. Since apparently no vent-hole for combustion gases has been detected on any of the rattles, Mackay suggests this as a possible reason for not coating the objects with a slip. The pottery was perhaps of itself porous enough to let the gas escape through it (Mackay 1931c:551).

[129] Except for a rattling sound heard from an animal figurine when shaken, which however is supposed to have been caused by an accidental inclusion of a little clay fragment (Mackay 1938d:558).

[130] In the published field register for the HR-area in Mohenjo-daro (Jansen & Urban 1985a), however, two entries were found by the present author that describe rattles in the form of animals (this concerns the entries with the field numbers 3573 and 6172).

Mohenjo-daro have come to light within any of the other 'ancient civilizations' (Mackay 1938d:558 and footnote 3).[131]

Comments on correspondence:

What we find in the field register can be presumed to broadly represent the kind of balls and rattles described above, especially if we consider the mentioned materials and the given additional information. However, we have only one single ball apparently adorned 'with spots' (a 'unique' variant, without counterparts among the balls described by Mackay?), and one rattle mentioned as 'ornamented'. Are we hence to understand that the majority of 'balls' and 'rattles' are plain in appearance? None of the balls from DK-C appear among those specimens that were selected for publication. However, one of the rattles has been described and illustrated (see fig. 5.18.). As can be seen in the figure, it is painted with horizontal stripes, and corresponds to the one specimen noted to be 'ornamented'. Considering that quite a number of balls in stone are listed in the field register, we may suppose that some small-sized and 'beautifully polished' examples may be present. The label 'marble' has obviously not been used on any object in the field register. As concerns the 'spheres', one of these is of shell while the other is mentioned as 'incised'. While incisions are common on the balls made of shell, and since the designation in question refers to a 'sphere' and not a 'ball', we may guess that the second item was also made of shell. The total number of 'balls' amounts to 66 registrations.

[131] With the exception of an egg-shaped rattle from pre-dynastic Egypt (Mackay 1938d:558 footnote 3).

Dice

…such a glut of them has been found…
(Mackay 1938d:560)

Presentation of objects:

In the field register, the following designation appears: 'dice'. Almost all of these objects are classed as "an ivory dice" or just "ivory dice". With three exceptions, all dice are made of ivory. Two of the three exceptions are described as "terracotta dice" and "conch dices two". The third exception lacks material definition: "fragmentary dice". In a few cases, we are additionally informed that the object in question has incisions. In three cases, the entry is: "an ivory dice with circular incision". There is also one "ivory die with ornamented surface" (FR 1924-25).

Presentation of corresponding objects in the published excavation reports:

Dice are described in detail in the two chapters *Games and Toys* in the published excavation reports (Mackay 1931c, 1938d). In the later report, they are presented in two different sections, one handling the cubical sort of dice and the other the long kind of dice (or 'tabular dice', to use Mackay's words) (Mackay 1938d:559ff). The first report mentions only the cubical dice. Somewhat contradictory, it is to be read in the earlier presentation: "/.../[t]hat dicing was a common game at Mohenjo-daro is proved by the number of pieces that have been found. In all cases they are made of pottery and are usually cubical/…/" (Mackay 1931c:551), whereas in the later publication Mackay notes that "/…/such a glut of [the tabular dice] has been found that there is no doubt that they were more commonly used than the cubical dice/…/". In fact, they are stated as so common that there is no need to present location and level of those selected for presentation. Both types of dice are said to occur at all levels (Mackay 1938d:559ff).

<u>Size, material and appearance:</u> The cubical dice are 0,75x0,75x0,75-1,5x1,5x1,5 inches in size (1,91x1,91x1,91-3,81x3,81x3,81 cm) (Mackay 1931c:551, 1938d:559f). The different types of tabular dice seem to have somewhat different lengths. The second type has the widest range, 1,35-4,02 inches in length (3,43-10,21 cm). According to the earlier report, the cubical dice are all of pottery, while in the later report cubical dice made from stone are mentioned as more recently found (fig. 5.19). In the list of presented specimens we find two pottery dice as well as one each in agate, lime-stone and grey stone, and in addition one object made of ivory. The tabular dice are mentioned as almost invariably made of ivory, with a few additional ones in bone. The cubical dice are by means of dots (consisting of shallow or deep holes) generally numbered from 1 to 6, similar to today's cubical dice. The 1 seems mostly to be found placed opposite 2, 3 placed opposite 4 and 5 placed opposite 6, although there exist according to the later report variations as well. None of the items however have the same arrangement as the dice of today; the sum of the points on any two opposite sides amounting to seven. Unique kinds of markings appear to have been found as well.[132] The objects are varied in shape and finish. Some are described as rough while others are exceptionally well made and polished. Some examples have well-defined edges, others rounded edges. According to the earlier report, the edges show little wear (Mackay 1931c:551f; 1938d:559f).[133] The tabular dice are listed according to five different sub-types. They are either square or triangular in section, and the distinction of types depends on numbers of sides with similar or different markings: *Square in section; four sides all different; Square in section; three sides different; Square in section; two*



Fig. 5.19. Example of a 'cubical dice' in pottery (from Marshall 1931a:Plate CLIII.8).

[132] One such example is the single specimen of ivory that according to Mackay exhibits sides adorned with pictographs and circular devices. In another case, the dots in question have been inlaid with beads, a technique that Mackay states as rarely used in Mohenjo-daro (Mackay 1938d:559f).

[133] Unique examples include an object of rectangular shape, which however nevertheless shows numbers on all sides (Mackay 1931c:551).

sides similarly marked; Triangular in section; three sides all different; Triangular in section; two sides alike; the third different. The most common numbering on the first type is 1, 2 and 3 (fig. 5.20). The numbers are represented by circular incisions of what seems to be single, double or triple circles in general on three different sides, while the fourth side is often ornamented with parallel lines in a longitudinal direction. Variations are to be seen as well, like different kinds of numbering. On the second type, the fourth side has the same pattern as some of the other three sides. The third type is mentioned as rare. The same marks are on the opposite sides. The fourth type, also mentioned as rare, is noted as interesting due to its variety of ornamentation. On the fifth type, the third side duplicates one of the other sides. Taken together, the tabular dice exhibit a great variety of markings and ornamentations. Besides circular incisions, other ornamentations such as curved lines and different cross patterns are frequent. Ornamentation, usually consisting of circles, are sometimes incised on the square-cut ends as well. Some examples display on one of their sides a row of pictographs, usually composed of different signs. Based on a number of examples, Mackay concludes that the various incisions were probably once filled in with either black or both black and red pigment. Irrespective of type, the dice are said to be generally well made as well as polished by much wear. The ones of ivory are mostly also well preserved. Individual objects may have a bluntly pointed end, or a slightly convex side (Mackay 1938d:560ff).

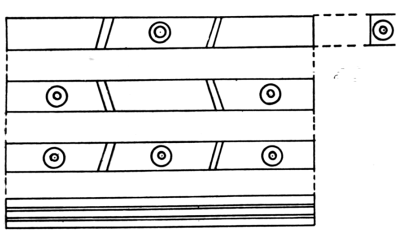


Fig. 5.20. Example of a long or 'tabular dice' of the first type (from Mackay 1938a:Plate CXLIII.47).

<u>Intercultural resemblances and suggestions for interpretations:</u> Mackay mentions the difficulty in knowing whether the dice were used by themselves, or together with some kind of game board that may have disappeared. In this connection, Mackay presents some suggestions on origin and distribution, based on similar finds from Egypt and Mesopotamia. Since the cubical dice appear to be markedly rare at roughly contemporary sites west of the Indus Valley, Mackay proposes this type "/…/to have originated in the East/…/" (Mackay

1938d:559).[134] In this connection, the well-known habit of playing dice in Vedic India is noted as well. Although these dice were distinctly different in shape from the ones found in Mohenjo-daro, Mackay nevertheless states that it is "/…/interesting, therefore, to find it practised in pre-Aryan times in India" (Mackay 1931c:552).

Comments on correspondence:

The entries in the field register of dice do not include any sub-classifications into either cubical or long shapes. None of the dice of the field register were among those selected for the report. However, two of these dice appear on photographs in the Sindh Volumes. On one of the photographs, a fragment (?) of an object that has strong similarities with the long type (apparently square in section) can be distinguished (fig. 5.21). On the other picture, a variety of rods can be seen, which in shape resemble the long types of dice (it is however not possible to tell which one of the pictured objects that corresponds to the dice listed in the field register) (fig. 5.22.). On grounds of the information given particularly in the later report, it seems for various reasons as if the majority of the entries of dice in the field register could be suggested to be of the long type. This is firstly due to the apparent commonness of this type. The majority of dice from DK-C are secondly made of ivory. Thirdly, they have in some cases in addition been noted to be decorated with incisions (three of which are noted to have circular incisions). A fourth argument in favour of the long dice could be drawn from our presumption that the registrations were made under the supervision of Dikshit. Considering that Dikshit was of Indian origin, and that the long type of dice is rather common in South Asia, this type could from Dikshit's



Fig. 5.21. Fragment (?) of what seems to be a long type of dice, described to be made of ivory (SV 12: O2R01927). Courtesy of Prof. Jansen, RWTH Aachen University.

[134] For more on finds of different kinds of dice outside Mohenjo-daro, see Chapter 3.

Indian perspective have appeared as the 'ordinary type of dice' in the same way as the cubical dice would probably appear as the ordinary type to someone from the West (that is, conceived of as without the need of being extra specified). This could partly explain the contradictory circumstance that the earlier report, within which the finds from the area of DK-C are included, does not mention any dice of the long type or of ivory. As we know, Dikshit left his mission due to ill health. Because of this, the final compilation concerning the area of DK-C was written by Mackay (who also wrote the chapter on games and toys). The majority of Dikshit's 'dice' (that is, of the long type and made of ivory), perhaps passed by unnoticed by Mackay, and/or became included in his sub-section of the game-related type 'casting bones' (see below).[135] Since according to the later report the long dice are mostly of ivory, with a few examples made of bone, it seems as if the entries "terracotta dice" as well as "conch dices two" on the other hand would represent the cubical sort of dice.[136] This shows us the somewhat surprising circumstance that the writer of the field register did not bother to distinguish between cubical- and long dice. The total number of 'dice' amounts to 35 registrations.

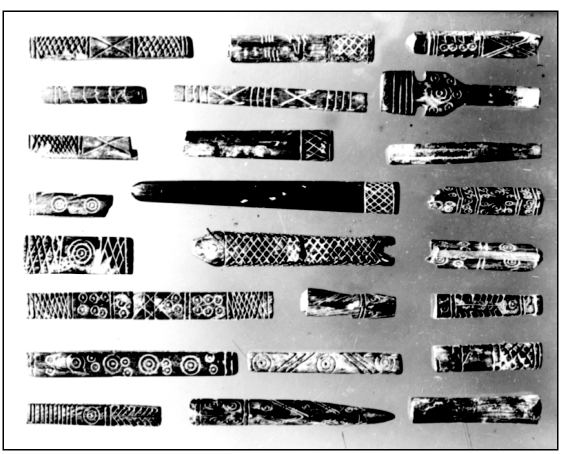


Fig. 5.22. A variety of rods, described to be made of ivory (SV 13:O1G02011). Courtesy of Prof. Jansen, RWTH Aachen University.

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[135] Mackay briefly mentions the possibility that a few examples of the casting bones could have acted as dice, at least if thrown two or more together (Mackay 1931c:556).

[136] Probably describing specimens in shell, the second entry could however also indicate long dice, shell and ivory being perhaps easily mixed up by a brief look.

Casting sticks

…the curious/…/ivory sticks, of which we find so many examples at Mohenjo-daro…
(Mackay 1938f:420)

Presentation of objects:

In the field register, the following entries appear: entries constructed with the term 'rod'; entries constructed with the term 'piece'; entries constructed with the term 'section'; entries constructed with other terms such as 'bar' or 'stick'; and a few entries of unique constitution. Entries constructed with the term 'rod' are the most common entries. Among these, the most common ones are registrations referring to ivory rods: "ivory rod" and "ivory rod with incisions". Entries constructed with the term 'piece' are usually defined as "ivory piece with incision". Entries constructed with the term 'section' are usually also including the label 'rod', and in some cases the label 'piece', such as "ivory rod rectangular section", or "ivory rod triangular section". Entries constructed in other ways are fewer in number. There are three "ivory bar", two entries constructed with 'sticks', as well as five registrations with unique labels. In most cases, the entries include specification of material. Most registrations concern objects of ivory. A few entries mention copper. We further come across one rod of shell, one piece of shell with incisions and one rod of shell mentioned as square in section. Two registrations lack information concerning material. Additional information is given in a majority of cases. Most registrations refer to 'incisions', while a few mention 'ornamentations' or 'pictographs', or that the objects are 'carved'. In some cases, information on state is given, such as an object being 'broken'. One entry refers to an "ivory rod thin", another to "ivory rods two (round & flat)". Two designations include colour: "3 black ivory pieces with ornamentation" and "pieces of hematite colour stick". The five unique designations concern "an ivory pointed rod", "one ivory pencil", "ivory counter broken", "ivory fish (broken)" and "ivory piece shaped like gitarr" (FR 1924-25).

Presentation of corresponding objects in the published excavation reports:

1. Casting bones/casting sticks

In the two chapters *Games and Toys*, we find a category of objects classed as *Casting Bones (?)* in the earlier report, and *Casting Sticks* in the later one (Mackay 1931c:556f, 1938d:562). In the earlier report, the same objects are, within the chapter on raw materials and objects of technical interest, additionally mentioned as examples of specimens made of ivory (Mackay 1931g:563). These objects are largely similar to the long dice, save that they bear the same, incised ornamentations on all their sides (with occasional variations). "All these objects (with [one exception]/…/) are common at all levels except the end of the Late Period", producing "/…/a considerable diversity/…/", a number of which are "very common", such as a type with a triangular section (Mackay 1931c:556f). Objects with a rectangular section are "very common" as well (Mackay 1938d:562f).

Size, material and appearance: The measurements vary greatly. One of the types, which is square in section, is noted to be 1,7-4,18 inches in length (4,32-10,62 cm), between which the sizes of the other specimens selected for publication appear to fit as well. Like the long dice, the majority are made of ivory while a few are of bone. They similarly appear in different, sometimes very dissimilar shapes. The later report lists four main types: *Square in section, Rectangular in section, Triangular in section,* as well as *Half round in section.* The first type displays the same, incised markings on all four sides. The second type mostly has the same but sometimes different incisions on the wider sides, while the narrow sides either have the same pattern or are blank. This type is very common. While most objects of this group have a parallel-sided, regular form, variations of body and ends can be seen as well (such as convex-shaped examples, or specimens with different forms of ends). The third type has three sides of the same pattern (fig. 5.23.). This group is also noted as numerous. The



Fig. 5.23. Example of a 'casting bone'/'casting stick' of the third type (from Marshall 1931a:Plate CXXXII.22).

specimens of this type sometimes have curious shapes, and sometimes they are of short length. The fourth type exhibits one pattern on the rounded side and another on the flat side. This type is rare. The earlier report mentions the square- and rectangular types as sometimes of a slightly tapering shape. Apart from the particular patterns already mentioned, the variety of incised ornamentations seems on the whole to resemble those of the long dice; such as circular incisions, kinds of cross patterns, straight or curved lines and the like. On some examples, ornamentation can likewise be seen incised on the ends as well, although this according to the earlier report is mostly not the case. In this report, the striking regularity of lines and circles is noted, and it is suggested that these have been made with a saw and a tubular drill. On a number of objects, the incised markings are further claimed to show traces of black and/or red pigment. Like the long dice, they are carefully made, while simultaneously noted as polished by much wear (Mackay 1931c:556f, 1938d:562ff).

Intercultural resemblances and suggestions for interpretations: Since the different sides of these objects exhibit the same pattern, it is stated that these objects "/.../could not have been used as dice". While all sides are ornamented, the use of them as "pieces of inlay" is likewise rejected (Mackay 1931g:563). The suggestion is that they were used in some game of chance. In this connection, we find a footnote saying that sticks have been found along with a game board in the grave of Tutankhamen. These sticks were apparently dropped, and then observed as to ways of falling; different combinations signifying different values (Mackay 1931c:556 and footnote 1).[137] Referring to Petrie, "[s]omewhat similar" items are known from Egypt (the First Dynasty), but none of the kind has occurred "/.../in either Mesopotamia or Elam/.../" (Mackay 1931c:556f). In the later report, we find the overall elusive character of the casting sticks clearly expressed: "/.../the curious, ornamented, ivory sticks, of which we

[137] The sticks are called throwing-sticks. They are black and white in colour and are according to the illustration all adorned with the same patterns made of incised lines. Two of the four specimens showed in the illustration have pointed ends (Illustrated London News, October 5, 1929:576).

find so many examples at Mohenjo-daro and whose use we should very much like to know/.../" (Mackay 1938f:420).[138]

2. Other ivory objects of the chapters *Games and Toys*

The section on casting sticks is in the later report followed by other, 'casting stick-like' ivory objects described as *Round Rods*, *Ivory Fish* and, lastly, *Miscellaneous Ivory Objects*. In the earlier report, however, the round type of rod as well as the fish type are included in the sub-section on casting bones. In addition, objects of a strange, flat, leg-like and very ornamented type are included as well. The round type of rod is in the earlier report mentioned as very rare. According to the later report, they are divided into two forms, the first form described as very common, the second one as rare. As concerns the fish, these are mentioned as not so common in the earlier report. The listed miscellaneous objects, of more or less odd shape, are few in number. According to the earlier report, several specimens of the leg-like type has been found (Mackay 1931c:556f, 1938d:562ff).

Size, material and appearance: In the later report, the first form of the round type of rod is said to have the same diameter throughout its length. The presented items are about 3 inches in length (7,62 cm). Rather frequently, the rod of this group exhibits an inscription on the middle part. Items of the second group that are presented range between 1,45-1,63 inches in length (3,68-4,14 cm). This form is said to have somewhat gamesmen-like shape with a 'head' and a 'base', the base however being of a rather narrow shape. Examples presented in the later report of the fish type range between 2,8-3,7 inches in length (7,11-9,4 cm), 0,28-0,49 inches in width (0,71-1,24 cm) and 0,19-0,28 inches in thickness (0,48-0,71 cm).



Fig. 5.24. Example of an ivory 'fish' (from Marshall 1931a:Plate CXXXII.19).

[138] A non-game-related interpretation of these kinds of objects is suggested by Vats (see Chapter 3).

The type constitutes flat objects formed like fish (fig. 5.24.). Eyes and fins are incised on both sides. In some examples, the eyes and fins show traces of white, red or black paint. The listed miscellaneous objects, of more or less odd shape, range between 2-3,23 inches in length (5,08-8,20 cm). One example seems to be of a similarly flat and markedly ornamented shape like the leg-like type. Other specimens resemble other variants of casting sticks but, as Mackay points out, they are of a rather column-like form, and show different kinds of markings. Odd types furthermore include a cubical example of the earlier report, displaying the same, incised ornamentation on all sides (Mackay 1931c:556f, 1938d:562ff).

<u>Intercultural resemblances and suggestions for interpretations:</u> The few examples of round rods of the second, gamesman-like type are in the section on balls and marbles assumed to have functioned as skittles (Mackay 1938d:565). The round rods of the first type are compared with similar finds from Taxila (although without inscriptions). The idea of them as having served as ornaments for, say, ear or nose, is rejected, as are previous thoughts of them as kinds of seals. In place of that, they are advocated as devices for some game, "/.../though what that was we do not yet know" (Mackay 1931c:557, 1938d:563f and footnote 2).[139] The 'ivory fish' are by Mackay regarded "/.../as being of very much the same nature as the sticks just described", while in the later report he says: "[t]hat they were a part of some game seems likely, as they are only roughly shaped/.../" (Mackay 1931c:557, 1938d:564). They are compared with some ivory fish from a royal burial at Nagadeh, Egypt, which were apparently used to symbolize food offerings; of which there is "no evidence, however", as Mackay continues, regarding the fish objects from Mohenjo-daro. The idea of these fish as amulets is also not favoured by him, as they lack perforation and as their marked polish seem to oppose the idea of them as having been wrapped in some way (Mackay 1931c:557, 1938d:564).[140]

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[139] These objects have by Professor Kenoyer been interpreted as having had a ritual significance (oral com., Kenoyer July 2010).

[140] Marshall is here of a different opinion while he among other things maintains that amulets need not be always perforated (Marshall in Mackay 1931c:557 footnote 2).

A look into other chapters of the published excavation reports provide some further objects which, despite having received other, non-game-related interpretations, in different ways can be said to resemble the casting stick type. They have therefore been included here:

3. Awls, metal rods and ivory batons

In the chapters both named *Household Objects, Tools, and Implements* under the sub-sections dealing with *Awls*, descriptions on specimens made of ivory or bone can be found (Mackay 1931f:470f, 1938f:420f). In the chapters on metal objects, we find *Awls* of copper or bronze, as well as *Metal Rods*, or *Kohl-sticks* as they are labelled in the later report (Mackay 1931h:504f, 1938g:475f). The awls are noted as frequently found and at all levels. The metal rods/kohl-sticks are noted as not so common as could have been expected, though occurring at all levels. In the later report, in the chapter on household objects, we find the sub-heading *Ivory Batons* (Mackay 1938f:432). Several examples from various levels have been found, although it is said that they were unknown before the year of 1927.

Size, material and appearance: The awls of bone or ivory seem from the examples displayed to be of about the same size as the casting sticks described above. They have apparently for a large part been trimmed down from the casting sticks. They are noted usually to display a rather blunt point, and to be markedly polished along the length of the thin (trimmed) part. The awls in metal range 1,5-4 inches in length (3,81-10,16 cm). Some are very thin: one presented example measures at the thickest part 0,1 inch in diameter (0,25 cm). They consist of rod-like shapes either round or square in section and are pointed in one or both ends. The length of the metal rods/kohl-sticks vary between 4,4-5,5 inches (11,18-13,97 cm), while the diameter of those presented is about 0,18 inches (0,46 cm). They have slightly rounded, blunt ends. The examples presented of the ivory batons are 2,7-7,8 inches in length (6,86-19,81 cm), with 0,44-0,66 inches in diameter (1,12-1,68 cm) at their wider parts. The objects are noted to show little variation in shape and pattern. They are slightly tapering, mostly with flat heads and semi-pointed ends and suggested as possibly turned on a lathe. Bands of hatched, incised decoration that sometimes show traces of filling of black paste are usually displayed

near the head. They are noted as attractively made and polished by much use (Mackay 1931f:470f, 1931h:504f, 1938f:420f, 432, 1938g:475f).

Intercultural resemblances and suggestions for interpretations: The awls in ivory or bone are suggested by Mackay as used in household work, probably on loose materials.[141] The metal rods/kohl-sticks are compared with a wide range of kohl-sticks of metal (for the application of cosmetics) like those from ancient and modern Egypt. The ivory batons are said to be of unknown purpose (Mackay 1931f:470f, 1931h:504f, 1938f:420f, 432, 1938g:475f).[142]

4. Hair-pins

In the two chapters named *Personal Ornaments*, lastly, objects grouped as *Hair-pins* can be found. According to the later report, a number have been found, while the more "interesting" ones are said to derive from the lower levels (Mackay 1931e:531f, 1938e:538ff).

Size, material and appearance: Based on the examples that are published, most of the hair-pins seem to be of a usually round type of three different lengths and widths: long and narrow (items on display range between 3,45-4,6 inches in length [8,76-11,68 cm], and 0,12-0,27 inches in diameter [0,30-0,68 cm]); short and thick (items on display are between 1,15-2,22 inches in length [2,92-5,64 cm], and 0,15-0,35 inches in diameter [0,38-0,89 cm]); short and narrow (items on display range between 2,2-2,16 inches in length [5,59-5,49 cm], and 0,15-0,21 inches in diameter [0,38-0,53 cm]). Some items are also of a short, flat and rectangular type (items on display are between 1,68-2,05 inches long [4,27-5,21 cm] and 0,2-0,35 inches wide [0,51-0,89 cm]) (fig. 5.25.). Of the first three types, the examples selected for publication are

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[141] Due to the roughness of the point and the broad area of polish, Mackay objects to the idea of them as used as some sort of pencil (Mackay 1938f:420).

[142] In the same report, the same chapter furthermore lists two *Perforated Square and Rectangular Rods of Unknown Use*. Their form suggests, shortly said, that they have once constituted 'casting sticks'. Since these among other features display holes drilled through and suggested for probable suspension, and since one of them in addition exhibits a band of copper wrapped around its middle part, Mackay however states them as probably modified for another, unknown kind of use (Mackay 1938f:433f).

mainly of ivory, with a few of copper/bronze or of bone. Of the rectangular form, all items presented are of ivory with one exception that is of bone. The examples of the first three types appear either straight or more or less tapering or pointed at one end, while the other end is recurrently ornamented in different ways. The body of those selected for publication is usually plain. The rectangular type appears mostly of a straight shape without a point (though some appear to be broken). The other end is ornamented in the shape of one or two birds suggested as ducks. The body of these objects is ornamented in ways which we recognize from the casting sticks, such as with incised, double circles and the like; or else with horizontally placed, curved lines or one line in a longitudinal direction. The incisions on some examples of the different types of hair-pins are mentioned as once filled with black pigment. Several are emphasized as highly polished by much wear (Mackay 1931e:531f, 1938e:538ff).



Fig. 5.25. Example of a 'hair-pin' of the short, flat and rectangular type (from Mackay 1938a:Plate CXXXVI.79).

Intercultural resemblances and suggestions for interpretations: One particular specimen, made of copper wire, is noted as similar to a number of hair-pins known from among other places Sumer, Egypt, and Central Europe. The duck-like ornamentations of the rectangular specimens are compared with objects found on certain plaques of ivory belonging to Pre-dynastic Egypt. This type is at the same time and due to its rectangular shape slightly doubted by Mackay as having functioned as hair-pin (Mackay 1931e:531f, 1938e:538ff).[143]

Comments on correspondence:

The entries of the field register as well as the finds that are referred can be seen as clearly challenging. The difficulties that must have foll-

[143] In more recent time, these items have been suggested as counters (see e.g. Kenoyer 2000:Fig. 6.41.).

owed these kinds of objects in terms of classification can be illustrated by the variety of designations given to this category. This indicates not only the absence of standard terms as concerns these objects, but probably the lack as well of any satisfying ideas as to their function(s).[144] The above listed designations have been divided into two groups depending on 'degree of certainty'. The basis for this division partly depends on those few specimens from DK-C which have been selected for presentation in the report, or which have been found on photographs in the Sindh Volumes. The first group includes designations of a more certain character. Here, designations have been included that refer to rods or pieces mentioned to be seen in *section*. In these, we can recognize the square-, rectangular-, triangular- or half round shaped casting bones/casting sticks. We can also recognize most of the *odd* specimens. The example described as 'fish' turns up as one of the items selected for publication and illustration in the report (see fig. 5.24). As concerns the 'pointed' rod or the one described as a 'pencil', we may possibly in these recognize the specimens suggested by Mackay as awls made from ivory. The single item classified as a counter may be included in this group as well, although we do not know its specific shape and appearance.[145] The large number of *rods* may also be included in this group. These could perhaps be thought to represent shapes that are not represented among those described as seen in 'section', such as round or markedly flat specimens. One of these 'rods' is however presented and illustrated among the 'casting bones' of the excavation report, where it is described as rectangular in section. The object is in addition suggested as having perhaps functioned as dice, since it only displays the same pattern on three sides, while the fourth side has three longitudinal lines (Mackay 1931c:556). In view of this, we may consider whether the distinction between what was seen as dice and what was seen as casting bones/casting sticks (that is, what was seen as not possible to use as

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[144] This impression becomes even more pronounced when looking into the extensive field register of the HR-area (Jansen & Urban 1985a).

[145] As to the object noted as resembling a guitar, as well as the examples described as 'sticks', these are not further considered here since these are among those specimens that will subsequently be omitted from further analysis due to lacking designations of point coordinates (see below).

dice) may have been drawn slightly differently by different authors.

In the second group, of a more 'uncertain' character, the *piece* has been included, since this in contrast to the 'rod' presents a much more neutral classification. A photograph of one of the items described as piece found in the Sindh Volumes seems however to indicate that these objects may constitute the same kind of object as the 'rod' (again, however, it is not possible to tell which one of the pictured objects that corresponds to the piece listed in the field register) (fig. 5.26.).

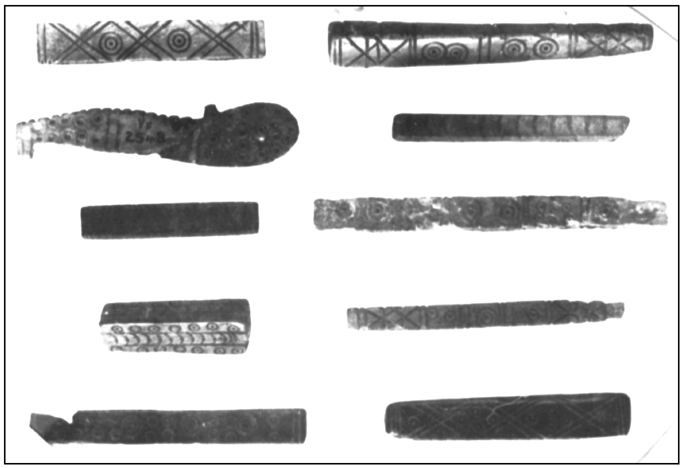


Fig. 5.26. A variety of rods, described to be made of ivory (SV 14:O3R00338). Courtesy of Prof. Jansen, RWTH Aachen University.

The *bars* are also put into this group, since it is difficult to know whether and in which ways the objects behind this label are to be distinguished from the other items. The rather few *rods of copper* have lastly been included in this group since they distinguish themselves quite differently from the casting bones/casting sticks. To conclude, it can be presumed that large parts of the registrations presented here refer to objects of the casting bone/casting stick-model. Factors of uncertainty may naturally be present; these are the more pronounced because of the non-standardized terminology, and due to the various propositions as to function (from casting bones/casting sticks to awls to hair-pins). If we, on the other hand, considered the number of designations referring solely to 'ivory piece' and the like, which as we remember were left out of the analysis, we would probably arrive at a certain degree of under representation as well. This category of objects will henceforth be named 'casting sticks group 1' (the group of 'certain' designations) and 'casting sticks group 2' (the group of

'uncertain' designations), respectively. The total number of 'casting sticks group 1' amounts to 42 registrations. The total number of 'casting sticks group 2' amounts to 30 registrations.

Summary

Through the support of game-related as well as in some cases non-game related information of the excavation reports, it has become possible to pinpoint certain designations listed in the field register as standing for potential, game-related types of finds. In this way, we have defined seven different types: 'gamesmen'; 'cones'; 'tetrahedra'; 'balls'; 'dice'; 'casting sticks group 1'; and 'casting sticks group 2'.

b. Spatial distribution[146]

Spatial distribution is based on the entries on horizontal orientation of each of the relevant registrations. These entries are in general composed of point coordinates (for each type except for the tetrahedra, some entries must be omitted due to the lack of designations of point coordinates. This is mentioned below. These entries will henceforth be omitted from the analysis without this being specifically mentioned). For best overview, spatial distribution is described for each type separately. For easy orientation, the different blocks of the DK-C area of relevance for the presentation are at this stage grouped into larger areas (fig. 5.27.). Thus, blocks 1, 2, 3 and 4 are grouped into the area *North*; blocks 5, 6, 7, 8 and 9 are grouped into the area *Middle A*; block 10, which has a northern and a southern part, is grouped into *Middle B*; blocks 11 and 12 are grouped into the area *South*. Streets and lanes are in turn included into appropriate areas. In case these form borders between different areas, they have been divided up according to the closest area. The below presentation

[146] Before the spatial distribution was undertaken, an examination was done that concerned whether a possible relation could be seen between the way of labelling the here selected object types and the date of the entries. No such relation could however be discerned.

concerns in which areas the various types have their largest and second largest concentrations, as well as in which area they are the least represented. The listed types are first mentioned as to their absolute and relative numbers.



Fig. 5.27. A section of the plan of the DK-B and C areas, displaying the DK-C area divided up into areas (from Marshall 1931a:Plate LXII).

<u>Gamesmen</u>
1 case omitted due to lack of designation of point coordinates: 30-1=29 registrations
29 registrations of in total 241 game-related registrations: 12 %
1 registration refers to two finds totally, which gives 29+1=30 finds
The majority of finds are located in 'South' (16)
The second largest group of finds is located in 'Middle A' (8)
'Middle B' constitutes the area with the least finds (2)

<u>Cones</u>
5 cases omitted due to lack of designation of point coordinates: 56-5=51 registrations
51 registrations of in total 241 game-related registrations: 21%
5 registrations refer to at least 13 finds totally, which gives 51+8=59 finds
The majority of finds are located in 'South' (51)
The second largest group of finds is located in 'Middle A' (6)
'North' constitutes the area with the least finds (0)

<u>Tetrahedra</u>
6 registrations
6 registrations of in total 241 game-related registrations: 3%
6 finds
The majority of finds are located in 'South' (4)
'Middle B' constitutes the area with the least finds (0)

<u>Balls</u>
7 cases omitted due to lack of designation of point coordinates: 66-7=59 registrations
59 registrations of in total 241 game-related registrations: 24%
1 registration refers to at least 2 finds totally, which gives 59+1=60 finds
The majority of finds are located in 'South' (25)
The second largest group of finds is located in 'Middle A' (17)
'Middle B' constitutes the area with the least finds (5)

<u>Dice</u>
5 cases omitted due to lack of designation of point coordinates: 35-5=30 registrations
30 registrations of in total 241 game-related registrations: 12%
3 registrations refer to 6 finds totally, which gives 30+3=33 finds
The majority of finds are located in 'South' (19)
The second largest group of finds is located in 'Middle A' (7)
'Middle B' constitutes the area with the least finds (3)

<u>Casting sticks group 1</u>
2 cases omitted due to lack of designation of point coordinates: 42-2=40 registrations
40 registrations of in total 241 game-related registrations: 17%
7 registrations refer to 20 finds totally, which gives 40+13=53 finds
The majority of finds are located in 'Middle A' (33)
The second largest group of finds is located in 'North' (9)
'South' constitutes the area with the least finds (5)

<u>Casting sticks group 2</u>
4 cases omitted due to lack of designation of point coordinates: 30-4=26 registrations
26 registrations of in total 241 game-related registrations: 11%
11 registrations refer to at least 22 finds totally, which gives 26+11=37 finds
The majority of finds are located in 'North' (23)
The second largest group of finds is located in 'Middle A' (12)
'South' constitutes the area with the least finds (1)

The balls constitute the largest number of the game-related types, followed by cones. If, however, the casting sticks of the two groups were considered together as one, single type, casting sticks would constitute the largest group with 66 registrations (27%). A noticeable majority of finds are located in the area 'South'. A relative lack of game-related finds may be noted for the area 'Middle B'. A noteworthy difference can be seen in the spatial distribution of the two groups of casting sticks in relation to the other types. The majority of finds of group 1 appear in the area 'Middle A' and the majority of group 2 appear in the area 'North'. In contrast, very few finds of these groups appear in the area 'South'.

Coda

Grounded in a collection of ***game-related designations****, which based on the empirical material seem reasonable, it is possible to differentiate among the finds whereby certain types are accentuated. A spatial distribution is thereafter, by use of these types, undertaken where differences and similarities become clearly visible. As is seen in the listed presentations of types, 'complete knowledge' cannot be attained. Likewise, we cannot gain access to any 'complete numbers' of game-related materials. However, grounded in the*

game-related information, we manage to select Collections of data that seem reliable for our context. That is to say, we manage to sort out a kind of entities that are both tangible and manageable.

The markedly uneven spatial distribution awakens the question whether such unevenness is to be searched for in the particular way of working of the archaeologists of that time. May the uneven spatial distribution have its 'cause' in excavational circumstances?

5.2.2. Coding
Starting from Material clusters →

The spatial distribution of the game-related types will be studied in relation to different aspects of excavational circumstances in order to see whether, and to which degree, the results of the spatial distribution are to be searched for within these. At first, (a) the spatial 'majorities' mentioned above for each type will be looked at from a relative perspective:

- How large are the spatial 'majorities' of the different types when seen from a relative perspective?

Thereafter, (b) the total number of registrations will be considered from a spatial perspective. This will be done to see whether these registrations will also show any concentrations, and whether such concentrations in that case will coincide with the ones of the game-related types:

- Does the spatial distribution of the total number of registrations show any concentrations? Do these in that case coincide with the concentrations displayed by the game-related types?

a. Relative relations

In order to be able to see a more reliable picture of the spatial distribution displayed by the game-related types, the distribution of

each type (the spatial 'majority', as well as the spatial 'second largest group' of each type as depicted above) are calculated as a percentage of the totality of finds of the type in question.

<u>Representation of 'majority of finds' of each type in relation to the totality of finds of the same type:</u>

- Gamesmen: the 16 finds found in 'South' represent 53% of the totality of finds of gamesmen
- Cones: the 51 finds found in 'South' represent 86% of the totality of finds of cones
- Tetrahedra: the 4 finds found in 'South' represent 67% of the totality of finds of tetrahedra
- Balls: the 25 finds found in 'South' represent 42% of the totality of finds of balls
- Dice: the 19 finds found in 'South' represent 58% of the totality of finds of dice
- Casting sticks group 1: the 33 finds found in 'Middle A' represent 62% of the totality of finds of casting sticks group 1
- Casting sticks group 2: the 23 finds found in 'North' represent 62% of the totality of finds of casting sticks group 2

<u>Representation of the second largest groups of finds of each type in relation to the totality of finds of the same type:</u> (the tetrahedra are left out due to having too few finds)

- Gamesmen: the 8 finds found in 'Middle A' represent 27% of the totality of finds of gamesmen
- Cones: the 6 finds found in 'Middle A' represent 10% of the totality of finds of cones
- Balls: the 17 finds found in 'Middle A' represent 28% of the totality of finds of balls
- Dice: the 7 finds found in 'Middle A' represent 21% of the totality of finds of dice
- Casting sticks group 1: the 9 finds found in 'North' represent 17% of the totality of finds of casting sticks group 1
- Casting sticks group 2: the 12 finds found in 'Middle A' represent 32% of the totality of finds of casting sticks group 2

The cones represent with their 86% the most centred type of objects (confined to the area 'South'). Except for the balls, the largest clusters of the other types all constitute more than half of their total numbers, respectively. The balls are the only group displaying a 'majority' of less numbers, 42%. Both groups of casting sticks exhibit noticeable 'majorities', 62% each, at the same time as they distinguish themselves spatially from the other types all mostly found within the area 'South'. As concerns the second largest clusters of the different types, three of these, those of gamesmen, dice and balls, respectively, can be observed to amount to about ¼ of the total numbers of each of the types. Since the majorities of gamesmen and dice, respectively, at the same time display marked numbers of finds (more than half of the totality of each type, as noted), we can conclude these types as rather densely distributed. The second largest group of the casting sticks of group 2 amount only to almost a third of the totality of finds of this type. Recalling the noteworthy 'majority' of cones in the area 'South', the small number of the second largest group of cones is rather logical. Although located in different areas, the casting sticks of group 2 and the cones can be noted to have interesting similarities in density. The balls, lastly, with their 42% of finds in the largest group and their 28% of finds in the second largest cluster, appear in contrast as the most evenly spread type.

b. Number of registrations of each area in relation to the totality of registrations

To see if overall noteworthy concentrations of registrations can be seen, the point-coordinates of the totality of registrations are 'translated' into respective area locations. As noted previously, the total number of registrations counts 3294 in total. However, a number of entries must be omitted due to lack of designations of point coordinates. Subtracting these, we are left with a total number of 2931 designations.

Area:	nos. of registrations:	% of 2931:
North	414	14
Middle A	702	24
Middle B	387	13
South	1426	49
Other[147]	2	0,07

The area 'South' covers almost half of the numbers of registrations. The area 'Middle A' constitutes almost ¼ of the cases, while the area 'North' followed by the area 'Middle B' represent the smallest clusters. We can accordingly conclude that there are marked differences to be seen. In turn, the uneven distribution displays notable similarities with the uneven distribution of the game-related finds. That is, an overwhelmingly large concentration is to be seen in the area 'South', for example, while the area 'Middle B' can be stated as almost empty.

Coda

Calculating relational proportions of the defined concentrations, ***majorities*** *and* ***second largest groups*** *appear as descriptive categories that can point out relations both within the various types as well as in-between them. A parallel consideration of the spatial distribution of the totality of registrations contributes to the picture of the distribution of the game-related types by setting them into a context.*

The result of the spatial distribution of the totality of registrations leads us to think that the markedly uneven distribution is mainly due to excavational circumstances. The southern location seems to have constituted the area that was given most attention during this first period of excavation. This awakens the question whether the particular, spatial distribution of the game-related finds, which as seen is roughly repeated by the totality of registrations, should be recognized as resulting from such excavational inequalities? If so, however, this would at the same time not account for the

[147] 'Other' refers to block 13, west of the area 'South', to which as seen two registrations belong (no game-related finds appear to have been recorded at this location during the first season of excavation).

conspicuously different distribution indicated by the 'majorities' of casting sticks. How come, that these are apparently not found in their largest numbers in the south? This makes the 'excavational' line of thought somewhat unconvincing.

5.2.3. Comparison (horizontal aspects) Starting from Material clusters →

In order to get a clearer understanding of the distribution of game-related registrations, the relative numbers of game-related registrations and the totality of registrations will be compared. To begin with a general comparison will be made, and thereafter will comparisons for each area be presented. This will be done on the one hand to see whether the distribution of the game-related registrations indeed are to be linked to different degrees of excavation activity. On the other hand, if this is not the sole case, the comparison will be undertaken in order to reach a way of passing by this obstacle:

- Are the concentrations displayed by the game-related registrations to be seen as resulting from excavational circumstances? If not, may other patterns become visible, patterns which cannot be said to follow 'excavational' patterns?

a. Relations between numbers of game-related registrations and the totality of registrations, generally and for each area

The totality of game-related registrations is counted and calculated as a percentage of the totality of registrations. Thereafter, the totality of game-related registrations for each area is counted and calculated as a percentage of the totality of registrations for each area.

Total reg.:	game-reg.:	game-reg. % of total reg.:
2931	241	8

Area:	total reg.:	game-reg.:	game-reg. % of total reg.:
North	414	41	10
Middle A	702	69	10
Middle B	387	17	4
South	1426	114	8

Calculated as a percentage, we see firstly that game-related registrations constitute a significant part of the totality of registrations, 8%. Secondly, we notice that the areas 'North' as well as 'Middle A' emerge as those areas having the relatively largest numbers of game-related registrations. What is of interest is thus that the area with the second largest quantity of cases ('Middle A'), displays a relatively larger number of game-related objects than the area 'South', despite the overwhelming amount of registrations in the area 'South'. There are relatively fewer numbers of game-related registrations in the area 'South' (8%). One may also note the relatively large number of game-related registrations of the area 'North', at the same time as the area 'Middle B' displays so few.

Coda

By comparing the numbers of game-related registrations with the totality of registrations for each area, the seemingly clear linkage between the spatial distribution of game-related registrations and degrees of excavation becomes somewhat 'disturbed'. This line of thought would perhaps function as an explanation if the concentrations of game-related finds in relation to concentrations of other registrations did not point at interesting differences. While not appearing solely as the consequence of an overall pattern dictated by excavational circumstances, but as something of more complex structure, the descriptive categories 'majorities' and 'second largest groups' of the game-related registrations appear more prominent as categories.

What, then, will happen to these results when measurements of depth are considered? Will some areas appear to have been more deeply excavated than others? If so, will there be some connection to be seen between such depth-related differences in excavation and concentrations of game-related objects?

5.2.4. Comparison (vertical aspects)
Starting from Temporal clusters →

In order to get at a still clearer picture and arrive at the three-dimensional forms of the sorted concentrations as far as this is possible, considerations on depth will lastly be included.[148] Considering the limitations following from the relative depth measurements that were undertaken during excavation, it will be examined whether it will be possible at all to distinguish something of viable significance. Considerations of level will furthermore be added to see if, in a similar way, some areas seem to have been more deeply excavated than others. In case of this, it will be asked whether links can be seen between such locations and concentrations of game-related finds:

- Is it possible to distinguish some pattern of significance as concerns depth-related locations?

a. Depth in relation to areas

To begin with, the deepest levels for each area are searched for to get at an orientating overview. This is done by examining a selection of

[148] As discussed previously, however, we must bear in mind the uncertainties that are unfortunately following with any such considerations, which therefore need to be treated cautiously.

registrations[149] (the following notions on depth must therefore be apprehended as approximate).

Area:	Deepest level :
North	08 ft (2,4 m)
Middle A	12ft (3,6 m)
Middle B	07ft (2,1 m)
South	18ft (5,4 m)

The deepest level is to be found in the area 'South'. Thereafter comes the area 'Middle A', followed by the area 'North' and, lastly, the area 'Middle B'. Although we must be aware of the uncertainty of these results since the designations of depth stand in relation to the topography of the area of DK-C, we can note that they coincide with what is indicated by the point coordinates. They also coincide with the distribution of registrations as to which areas were the most/the least excavated.

b. Depth in relation to the spatial distribution of the game-related registrations

The designations of depth of the game-related registrations are converted from feet into metres and then sorted into different depth intervals of approximately one metre. The sorting into depth intervals is done due to the uncertainty following considerations on depth. With the depth intervals, we get at larger, and thus more manageable, clusters of depth measurements. By this, we can try to distinguish possible, vertical patterns of a larger format.

Established depth intervals:

1. Ca. 0-1 m
2. Ca. 1-2 m

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[149] The registrations selected for this undertaking are the same registrations that in a subsequent part of this analysis (level 2) will be studied for obtaining information on non-game-related finds.

3. Ca. 2-3 m
4. Ca. 3- m

Spatial distribution that includes a differentiation into depth intervals is analyzed through the use of scattered schemes.[150] Since these are based on the point coordinates, the finds on the schemes are proportional to the published plan of the area and the structural parts revealed during the first season of excavation (see fig. 5.1.). The finds are distinguished according to their type. If a registration refers to two or more finds, and if the number of finds of such registration is noted in the field register (like 'two terracotta balls') the symbol used to denote the registration is marked in according numbers. If not, the symbol in question is marked twice. The below list of depth intervals of the different types is followed by a presentation of depth intervals of each area when considering the totality of game-related finds of each area:

Gamesmen (fig. 5.28.)
Finds mostly appear within the interval 0-1 metres and thereafter the interval 1-2 metres
The finds making up the 'majority' in the area 'South' appear equally within the interval 0-1 metres and the interval 1-2 metres

Cones (fig. 5.29.)
Finds mostly appear within the interval 2-3 metres, thereafter the interval 1-2 metres and thereafter the interval 3- metres. Fewer appear within the interval 0-1 metres
The finds making up the 'majority' in the area 'South' mostly appear within the interval 2-3 metres, thereafter the interval 3- metres and thereafter the interval 1-2 metres. Fewer appear within the interval 0-1 metres

Tetrahedra (fig. 5.30.)
Finds mostly appear within the interval 0-1 metres and thereafter the interval 1-2 metres. Fewer are found within the interval 2-3 metres

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[150] These schemes also illustrate the horizontal orientation of the finds, which were discussed under 5.2.1.b.

The finds making up the ′majority′ in the area ′South′ appear equally within the interval 0-1 metres and the interval 1-2 metres

<u>Balls</u> (fig. 5.31.)
Finds mostly appear within the interval 1-2 metres and thereafter the interval 0-1 metres. Fewer appear within the interval 3- metres. Fewer still appear within the interval 2-3 metres
The finds making up the ‘majority' in the area ‘South' mostly appear within the interval 1-2 metres and thereafter the interval 3- metres. Fewer appear within the interval 0-1 metres and fewer still within the interval 2-3 metres

<u>Dice</u> (fig. 5.32.)
Finds mostly appear within the interval 0-1 metres and thereafter the interval 1-2 metres. Fewer appear within the interval 2-3 metres
The finds making up the ′majority′ in the area ′South′ appear equally within the interval 0-1 metres and the interval 1-2 metres. Fewer appear within the interval 2-3 metres

<u>Casting sticks group 1</u> (fig. 5.33.)
Finds mostly appear within the interval 0-1 metres, thereafter the interval 1-2 metres and thereafter the interval 2-3 metres
The finds making up the ′majority′ in the area ′Middle A′ mostly appear within the interval 0-1 metres, thereafter the interval 1-2 metres and thereafter the interval 2-3 metres

<u>Casting sticks group 2</u> (fig. 5.34.)
Finds mostly appear within the interval 0-1 metres, thereafter the interval 1-2 metres and thereafter the interval 2-3 metres
The finds making up the ′majority′ in the area ′North′ mostly appear within the interval 0-1 metres and thereafter the interval 1-2 metres

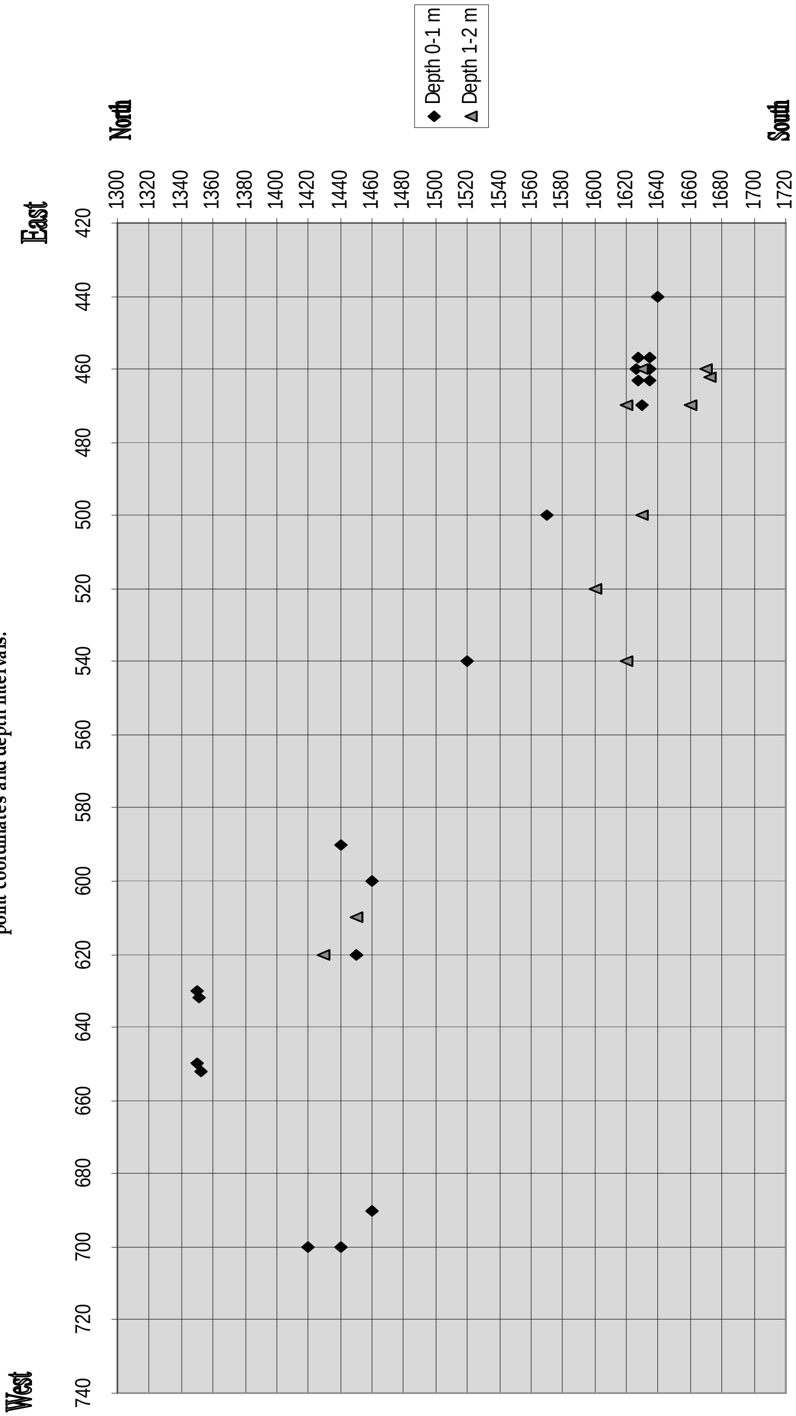


Fig. 5.28. Spatial distribution of gamesmen according to point coordinates and depth intervals.

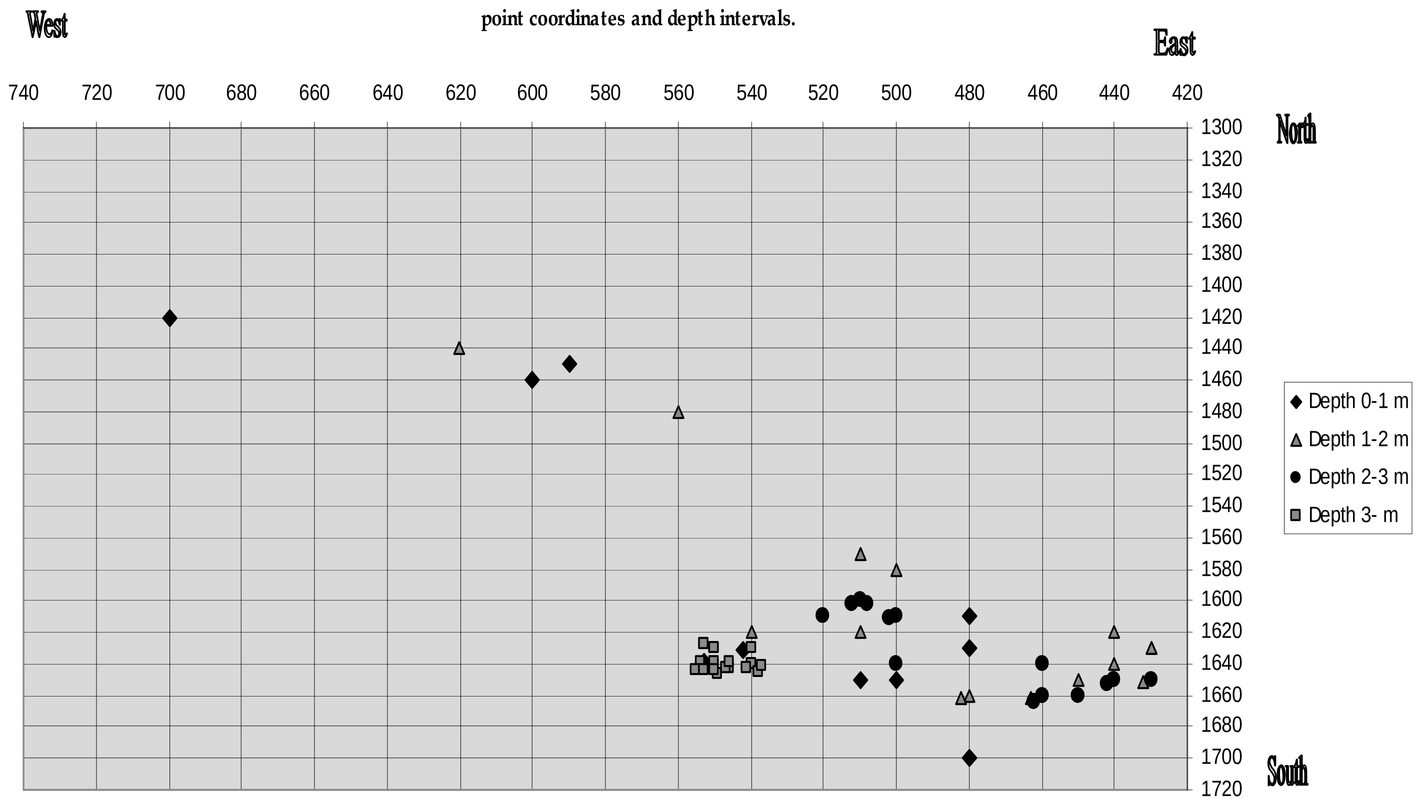


Fig. 5.29. Spatial distribution of cones according to point coordinates and depth intervals.

Fig. 5.30. Spatial distribution of tetrahedra according to point coordinates and depth intervals.

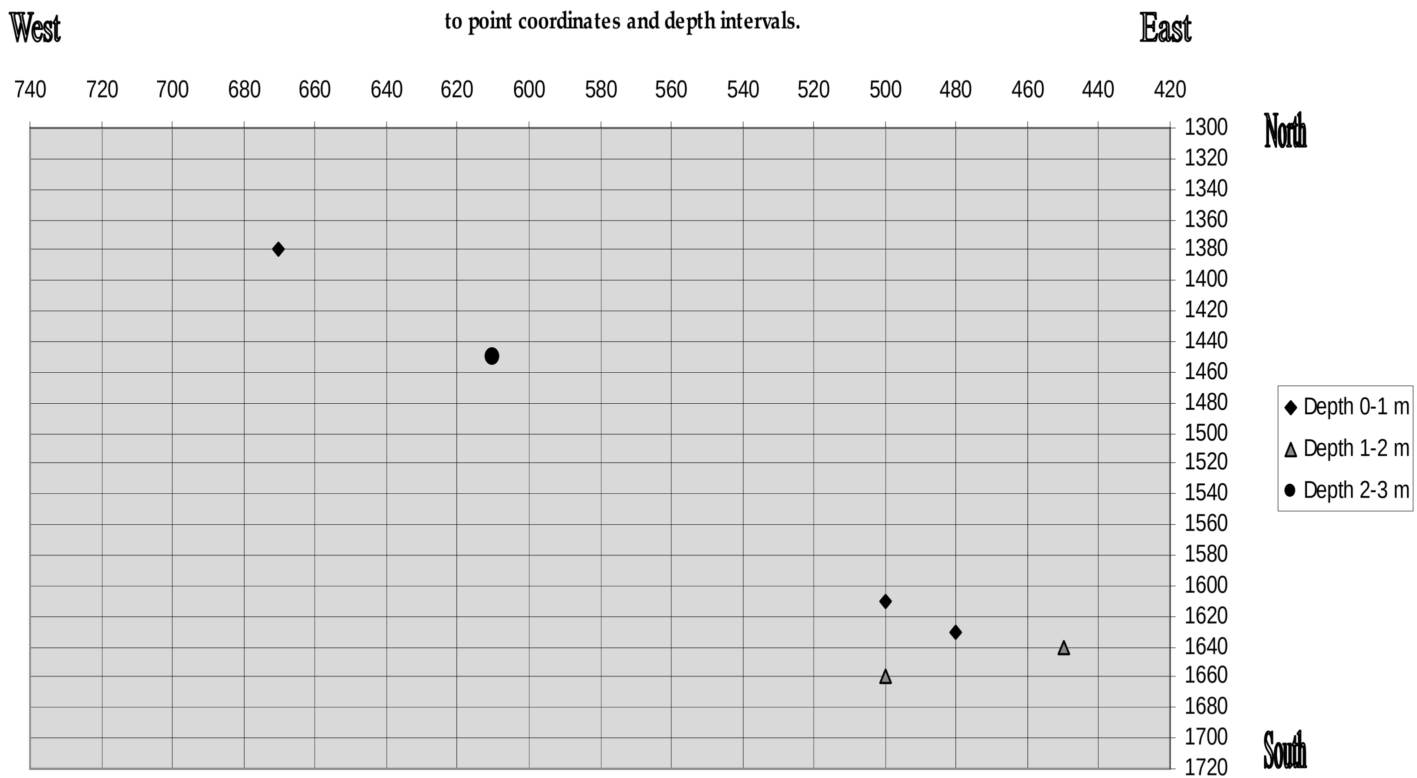


Fig. 5.31. Spatial distribution of balls according to point coordinates and depth intervals.

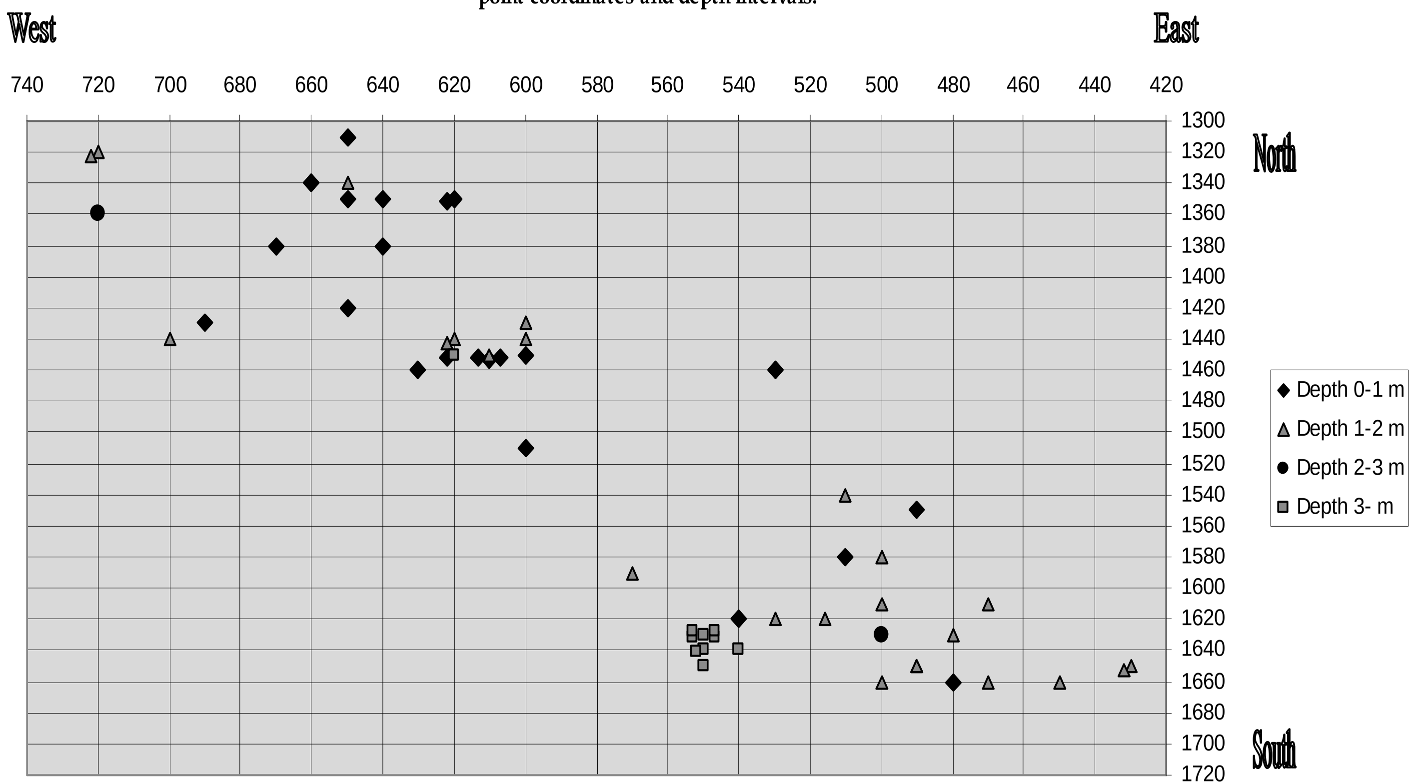
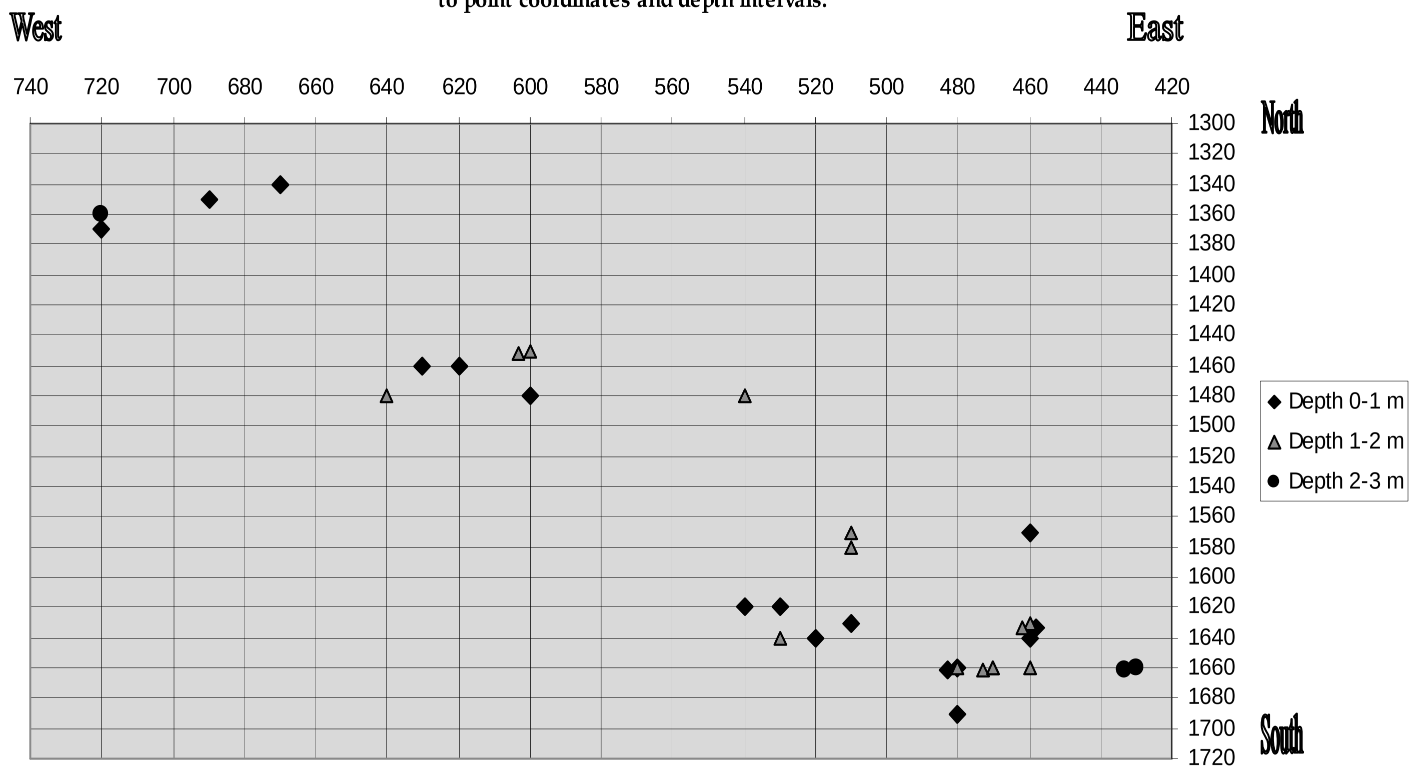


Fig. 5.32. Spatial distribution of dice according to point coordinates and depth intervals.



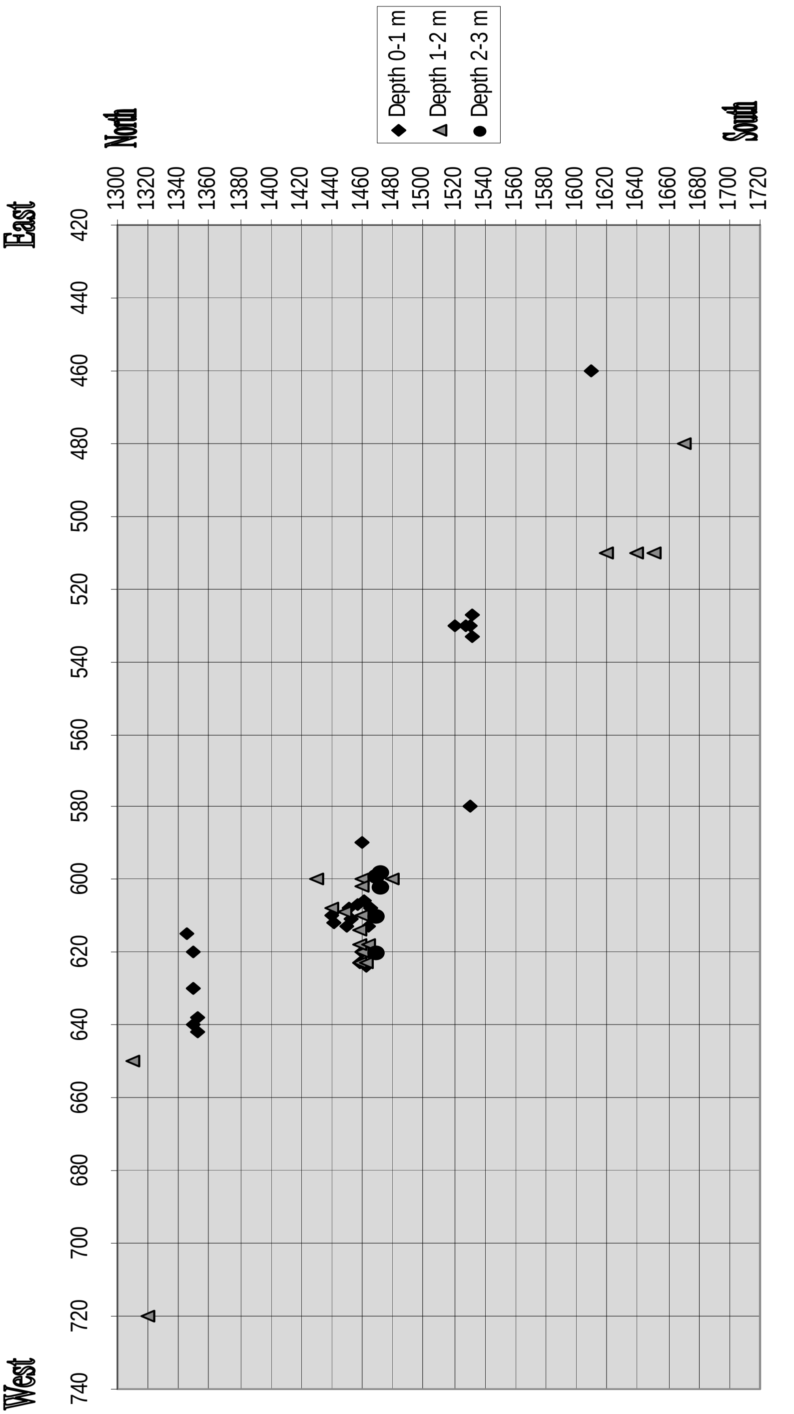
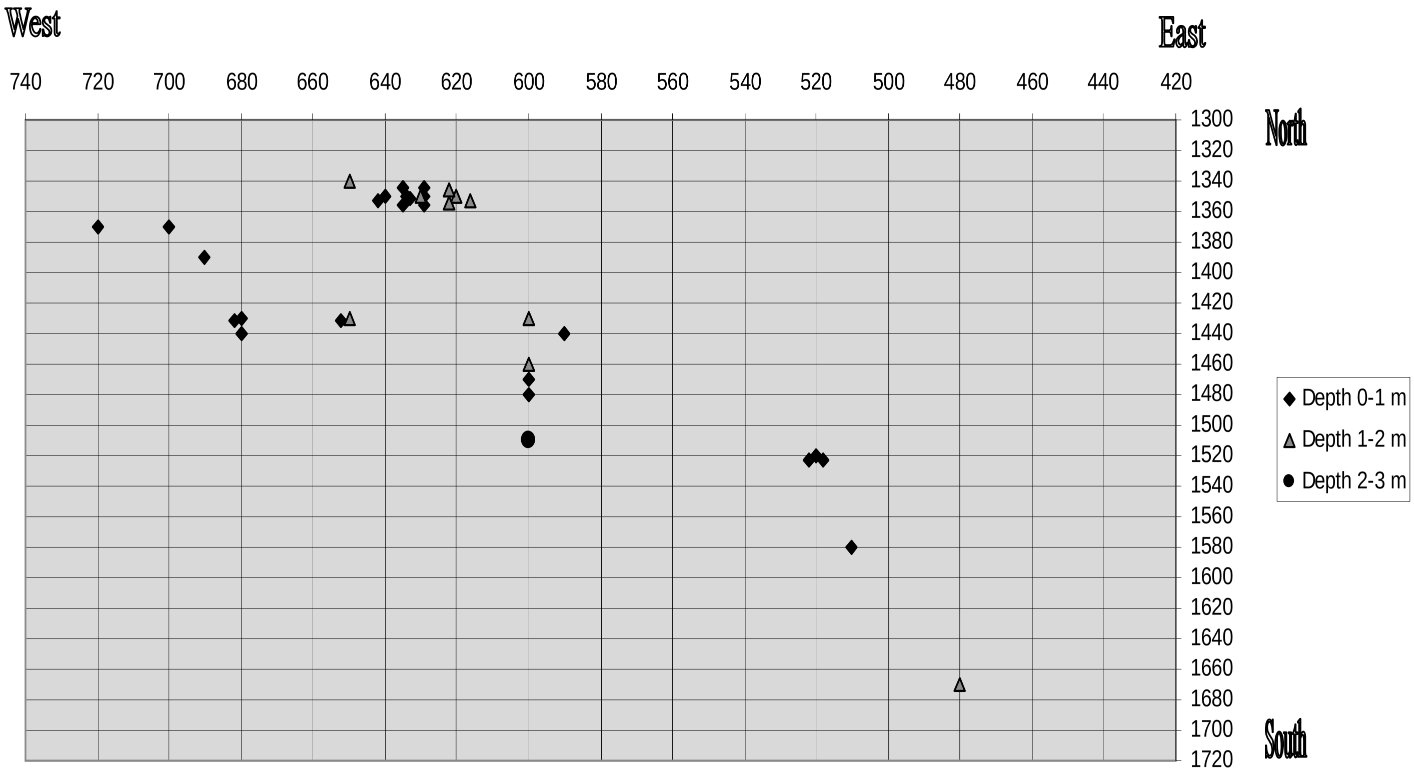


Fig. 5.33. Spatial distribution ocf casting sticks group 1 according to point coordinates and depth intervals.

Fig. 5.34. Spatial distribution of casting sticks group 2
according to point coordinates and depth intervals.



<u>Depth intervals of areas:</u>
'North': consists mostly of finds from the interval 0-1 metres and thereafter of finds from the interval 1-2 metres. Fewer finds are from the interval 2-3 metres
'Middle A': consists mostly of finds from the interval 0-1 metres, thereafter of finds from the interval 1-2 metres and thereafter of finds from the interval 2-3 metres
'Middle B': consists mostly of finds from the interval 0-1 metres and thereafter of finds from the interval 1-2 metres
'South': consists mostly of finds from the interval 1-2 metres, thereafter of finds from the interval 2-3 metres and thereafter of finds from the interval 0-1 metres. Fewer finds are from the interval 3- metres

A number of relationships between spatial distribution and depth may naturally be 'caused' by the topography of the area DK-C. However, we can at the same time note that some game-related types, such as casting sticks of group 1, appear at different depth intervals, while others are bound to a few, such as gamesmen. We note that balls and cones are the only types that are found in the deepest interval 3- metres. Since these specimens are found at one particular location, this awakens the question whether more balls and cones would be found, if more locations were excavated as deep as this one? Concerning the cones, these appear on the whole to be found at deeper depth intervals. This is clearly seen in the area 'South', where they provide a somewhat contrasting picture when compared with the not so deeply situated dice and gamesmen. How come, that the latter two types are not, with a few exceptions, found in the interval 2-3 metres? The question why so few casting sticks of both groups are found in the area 'South' seem furthermore not to be explained by different depths of excavation. As concerns the casting sticks of group 1, we note that within their densest clustered locality, in the area 'Middle A', they are to be found within all depth intervals except for the interval 3- metres. Similar to the cones, they appear in a contrasting light when compared with the dice and gamesmen.

Coda

Despite the carefulness that needs to be employed concerning the vertical aspects, the earlier defined entities, majorities and second largest groups, can be suggested to be more distinctly outlined. They emerge in a context of growing 'relations' seen both within and in-between the types. The area 'South' seems not only to harbour most registrations, but the deepest levels as well. Considering this, for example, the significance of the relatively large number of game-related objects in the area 'Middle A' is emphasized.

Can we so far conclude that game-related materials exist?

5.2.5. Conceptualisation
Starting from Temporal clusters →

In this level, which I have chosen to call Basement, the twofold character of the analysis is clearly illustrated. By examining how the field register was written, we have aimed at defining what sorts of objects the different, selected registrations represent. Based on the information provided by our sources at hand, we can suggest that play- and game-related objects exist to such a degree that they can be both sorted out in the form of game-related designations, as well as spatially sorted as manageable entities.

Summary of some results:

- Game-related types have been possible to select in the form of Gamesmen; Cones; Tetrahedra; Balls; Dice; Casting sticks group 1; Casting sticks group 2
- The different game-related types display the following relations: Casting sticks of both group 1 and 2 28%; Balls 24%; Cones 21%; Dice 12%; Gamesmen 12%; Tetrahedra 3% (of the totality of game-related registrations)
- Marked differences can be seen in the spatial distribution of the number of game-related finds, with some locations (such as 'Middle B') lacking these finds more or less completely
- Spatial distribution of the majority of Casting sticks differs markedly from those of the majorities of the other game-related types
- Cones constitute the most centred type of object, being more or less confined to one, single area (the area 'South')
- Game-related registrations constitute 8% of the totality of registrations

Summary of method:

Collection: Based on a collection of *game-related designations*, it has become possible to differentiate between the finds, due to which certain types appear. With these, a spatial distribution has been undertaken that has been able to show differences and similarities.

Coding: By a focus on relational proportions, *majorities* and *second largest groups* appear as descriptive categories that can point out relations both within the various types as well as in-between them.

Comparison (horizontal aspects): By not appearing solely as a consequence of excavational circumstances, the categories majorities and second largest groups of the game-related registrations can be suggested to come forth as something of a more complex nature and with this, become more prominent as categories.

Comparison (vertical aspects): Despite the carefulness that needs to be employed concerning the vertical aspects, the earlier defined entities majorities and second largest groups can be suggested to come into view as more distinct entities, appearing in a context of growing 'links' seen both within and in-between the types.

Although largely defined and conditioned by our specific, empirical circumstances, the results are however at the same time not to be seen solely as the outcome of excavational differences. Distinctions and connections of other kinds are hinted at as well that create new sorts of questions. Such questions can be said to centre on the matter of causes to the spatial pattern. If game-related finds exist, then how were they once left behind?

5.3. Characterizing spatial appearance of the game-related types: formulating concepts (Level 1)

We have seen that the visible differences in spatial distribution cannot solely be explained as a result from excavational circumstances. Should they be seen as coincidental? Or can other more regulated kinds of patterns be distinguished in the ways the objects have been left behind? What kind of objects are we looking at when seen from this perspective, scattered, or rather deposited materials? Since the finds are all actually left behind in some or the other way, questions such as these may be taken as a suitable basis for a closer investigation of the visible differences[151]:

- What spatial patterns are we looking at in regard to the question of being left behind?

5.3.1. Collection of data
Starting from Spatial clusters →

In the previous level, the distinguished, repetitive differences were sorted into manageable clusters in the shape of *majorities* and *second largest groups* in relation to larger *areas*. However, in order to grasp patterns of spatial distribution made up by objects being left behind, the repetitive differences will now be studied according to *blocks*. The materials will be approached in three different ways in order to be sorted into clusters that will be suitable for the particular inquiry of this level: (a) by identifying the number of game-related registrations in relation to the totality of registrations per block:

- What do spatial distributions of game-related registrations look like within different blocks? Can larger/smaller concentrations be discerned?

(b) by looking for concentrations of particular types of game-related objects according to blocks/parts of blocks:

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[151] More problematizing views regarding the term 'to be left behind' is to be found in Chapter 6.

- What do the previously mentioned concentrations for the different, game-related types look like when seen from the viewpoint of blocks/parts of blocks?

and (c), by identifying 'other' parts of the spatial pattern in relation to blocks/parts of blocks as well as types. With 'other', I am referring to minor clusters of game-related objects and scattered features seen among the objects:

- What do 'other' parts of the spatial pattern look like in relation to blocks/parts of blocks and types, such as clusters with fewer game-related objects as well as scattered features of these objects?

a. Number of game-related registrations of each block calculated as a percentage

To get at a finer picture of the previously established differences noted between the different areas, the game-related registrations are divided up in regard to blocks of belonging.[152] The results are calculated as a percentage in relation to the totality of registrations according to block. In consequence with the previous order, the list of blocks is presented according to areas of belonging (blocks that display only one, single game-related registration, or are lacking any such registrations at all, are left out).

North:	game-reg./total reg.:	game-reg. % of total reg:
Bl 4	14/118	12
Bl 3	14/142	10
Bl 2	6/70	9
Bl 3-4	5/66	8

[152] Since some point coordinates were found to be situated exactly in-between two or sometimes three different blocks, a number of designations referring to more than one block had to be included. Also, some designations appear that refer to streets/lanes situated in-between blocks and sometimes areas. Thus, 'bl 11-12str' concerns for example the street that separates blocks 11 and 12 from each other. 'Bl 8-10str-bl8' refers both to the street separating the blocks 8 and 10 (and therefore the areas 'Middle A' and 'Middle B'), as well as to a part of this street that is closer to block 8 than block 10 (i.e. its northern part).

The block with the largest number of registrations is block 3 (142 reg.)
The block with the smallest number of registrations is block 1 (5 reg.)

Middle A:	game-reg./total reg.:	game-reg. % of total reg:
Bl 8-10str-bl8	2/8	25
Bl 2-5str-bl5	2/9	22
Bl 7-8	6/40	15
Bl 5-7-8	3/21	14
Bl 7	3/24	13
Bl 8	32/285	11
Bl 5	14/134	10
Bl 9	3/41	7
Bl 6	2/45	4

The block with the largest number of registrations is block 8 (285 reg.)
The block with the smallest number of registrations is block 9 (41 reg.)

Middle B:	game-reg./total reg.:	game-reg. % of total reg:
Bl 10	8/103	8
South part bl 10	10/271	4

The block with the largest number of registrations is the southern part of block 10 (271 reg.)
The block with the smallest number of registrations is block 10 (103 reg.)

South:	game-reg./total reg.:	game-reg. % of total reg:
Bl 11	30/377	8
Bl 12	57/730	8
Bl 11-12str	23/318	7

The block with the largest number of registrations is block 12 (730 reg.)
The block with the smallest number of registrations is block 11-12str (318 reg.)

Bl 8-10str-bl8 as well as Bl 2-5str-bl5 (in Middle A) each display particularly high percentages of game-related registrations. However, as these localities contain rather few registrations, these percentages become somewhat misleading. In the following table, these are therefore omitted. The table lists the percentages above of game-related registrations according to tentative divisions into large-, middle-, or small-sized clusters. Marked differences can be seen within, as well as in-between, the different areas:

Large-sized clusters:	Middle-sized clusters:	Small-sized clusters
Bl 7-8: 15%	Bl 2: 9%	Bl 6: 4%
Bl 5-7-8: 14%	Bl 10: 8%	Soutth bl 10: 4%
Bl 7: 13%	Bl 11: 8%	
Bl 4: 12%	Bl 12: 8%	
Bl 8: 11%	Bl 3-4: 8%	
Bl 3: 10%	Bl 9: 7%	
Bl 5: 10%	Bl 11-12str: 7%	

Most of the blocks forming the area 'Middle A' are found among the largest clusters. A particular concentration can be seen in blocks 7 and 8 and in the intersection consisting of parts of the blocks 5, 7 and 8. Blocks 9 and 6 appear as much less clustered outskirts of the same area. Another concentration can be distinguished in parts of blocks 4 and 3 in the area 'North'. The three blocks forming the area 'South' appear in contrast more evenly distributed. It can be noted that apart from the area in the south, none of the blocks mentioned to hold the largest number of registrations of the respective areas display the largest number of game-related registrations of the area in question.

b. Concentrations of game-related types in relation to blocks/parts of blocks

To be able to see a contrasting picture, a closer investigation is undertaken of the previously defined, area-related concentrations displayed by the different types of game-related remains. The spatial location of the largest as well as second largest groups noted earlier for each type is attended to in regard to blocks or parts of blocks, in order to identify internal concentrations and variations ('exceptions' relate to finds that can be suggested to lie too far away from any concentrations displayed by the various types, respectively. 'Scattered' finds relate to finds of a scattered appearance; due to the small size of the group of objects to which they belong, however, they are not regarded as true exceptions) (see figures 5.27. – 5.34.):

<u>Found in 'North': the majority of finds of *Casting sticks group 2*; the second largest group of *Casting sticks group 1*:</u>

1. Objects comprising the majority of finds of *casting sticks group 2* (23 of 37 finds), located in 'North', are found on and around the border of blocks 3 and 4. Four exceptions can be seen
2. Objects comprising the second largest group of *casting sticks group 1* (9 of 53 finds), located in 'North', are found on the border of blocks 3 and 4 as well as close to the border in block 4. Two exceptions can be seen

<u>Found in 'Middle A': the majority of finds of *Casting sticks group 1*; the second largest group of *Casting sticks group 2*; *Dice*; *Balls*; *Cones* and *Gamesmen*, respectively:</u>

3. Objects comprising the majority of finds of *casting sticks group 1* (33 of 53 finds), located in 'Middle A', are to the largest part found in a part comprising the middle part of block 8, as well as the border area of blocks 5 and 8. To a lesser degree, they are found in a part comprising the border area of blocks 7 and 8, as well as the northern part of block 8. Single examples are found on the border of blocks 5 and 6 and in block 7
4. Objects comprising the second largest group of *casting sticks group 2* (12 of 37 finds), located in 'Middle A', are found in the northern and north-western parts of block 5, in block 7, as well as in the northern and middle parts of block 8. One exception can be seen
5. Objects comprising the second largest group of *dice* (7 of 33 finds), located in 'Middle A', are found in the northern and middle parts of block 8, as well as on and around the border of blocks 5 and 8. Two scattered finds can be seen
6. Objects comprising the second largest group of *balls* (17 of 60 finds), located in 'Middle A', are to the largest part found in one, extended part comprising the southern part of block 7; the border areas between blocks 7 and 8; 5, 7 and 8; 5 and 8; as well as the northern part of block 8. To a lesser part, they are found in the north-western, northern and southern parts of block 5, including the area close to the street in the north. One exception can be seen
7. Objects comprising the second largest group of *cones* (6 of 59 finds), located in 'Middle A', are mostly found as single examples on the border of blocks 5, 7 and 8; in the northern and middle parts of block 8; in block 9; as well as in the north-western part of block 5, close to the street. Three scattered finds can be seen
8. Objects comprising the second largest group of *gamesmen* (8 of 30 finds), located in 'Middle A', are found in the western and north-

western parts of block 5, including the area close to the street; on the borders of blocks 5 and 7; 7 and 8; 5 and 8; as well as in the northern and middle parts of block 8. One scattered find can be seen

Found in 'South': the majority of finds of *Dice*; *Balls*; *Tetrahedra*; *Cones* and *Gamesmen*, respectively:

9. Objects comprising the majority of finds of *dice* (19 of 33 finds), located in 'South', are to the largest part found in one part in the south of block 12 and in one part in the north of block 12. Fewer numbers are found in the south-eastern and north-western parts of block 12, in block 11-12str as well as in the western part of block 11
10. Objects comprising the majority of finds of *balls* (25 of 60 finds), located in 'South', are to the largest part found in one part of block 11-12str the western part, as well as in the southern part of block 12. To a slightly lesser degree, they are found in the western, northern and middle parts of block 11; the middle part of block 11-12str; as well as the northern part of block 12
11. Objects comprising the majority of finds of *tetrahedra* (4 of 6 finds), located in 'South', are found as single examples in the middle part of block 11; and in the northern, eastern and southwestern parts of block 12
12. Objects comprising the majority of finds of *cones* (51 of 59 finds), located in 'South', are to the largest part found in and around one part of block 11-12str the western part; as well as in one, extended eastern and south-eastern part of block 12. To a slightly lesser degree, they are found in the western, northern and middle parts of block 11; the eastern part of block 11-12str; as well as the northern and western parts of block 12
13. Objects comprising the majority of finds of *gamesmen* (16 of 30 finds), located in 'South', are to the largest part found in one part in the north of block 12, as well as in the southern part of block 12. Fewer examples are found in the western and northern parts of block 11; the middle part of block 11-12str; as well as the eastern part of block 12

The presentation gives us information on number and nature of internal densities/scattered features. This can be displayed as follows:

North:

1. The majority of finds of *casting sticks group 2*: forms 1 markedly dense, markedly numerous, spatially medium-sized cluster; with exceptions
2. The second largest group of *casting sticks group 1*: forms 1 markedly dense, numerous, spatially medium-sized cluster; with exceptions

Middle A:

3. The majority of finds of *casting sticks group 1*: forms 1 dense, markedly numerous, spatially large cluster
4. The second largest group of *casting sticks group 2*: forms scattered features within somewhat limited areas; with exception
5. The second largest group of *dice*: the few items of this group are mostly found within a limited area
6. The second largest group of *balls*: forms 1 medium dense, numerous, spatially large cluster, as well as a lesser, more scattered part; mostly found within a limited area; with exception
7. The second largest group of *cones*: the few items of this group are mostly found within a limited area
8. The second largest group of *gamesmen*: the few items of this group are mostly found within a limited area

South:

9. The majority of finds of *dice*: forms 2 dense and numerously small clusters, one of them spatially medium-sized and the other small in size; a few scattered features within a large area
10. The majority of finds of *balls*: forms 1 dense, numerous, spatially medium-sized cluster; mostly scattered features within a large area
11. The majority of finds of *tetrahedra*: forms scattered features within a large area
12. The majority of finds of *cones*: forms 1 markedly dense, markedly numerous, spatially medium-sized cluster; 1 medium dense, numerous, spatially large cluster; mostly scattered features within a large area
13. The majority of finds of *gamesmen*: forms 1 markedly dense, numerously medium-sized, spatially small cluster; a slight majority of scattered features within a large area

The different types display different kinds of concentrations. The majority of finds and the second largest group of casting sticks group 1 are the least dispersed. Secondly least dispersed are casting sticks

group 2, which are slightly more scattered. The scattered examples are however only to be seen within the second largest group of this type, which is of rather small size. The previously mentioned pattern of concentrations of these types thus becomes further strengthened. At the other end, balls and cones both display 'proper' clusters, medium dense clusters as well as a large number of scattered items. The second largest group of cones, in Middle A, is however of a markedly small size, while the type has a noticeable concentration towards the southern area. Somewhat similar, southerly located concentrations can be noted among dice and gamesmen, although of less profound appearance since the number of these types is much more limited. With their smaller-sized clusters and scattered features, they range somewhere in-between the other types. Tetrahedra, lastly, of a very limited number, can only be noted as scattered.

c. 'Other' parts of the spatial pattern in relation to blocks/parts of blocks as well as types

The last study concerns the remaining parts of the pattern of spatial distribution; smaller clusters with game-related finds as well as more scattered features. This is considered in relation to blocks or parts of blocks as well as types. The listed results include the dispersed finds and exceptions noted above, together with further game-related objects of scattered appearance. To begin with, a list is presented with game-related finds of the area 'Middle B', the only area that was not included while going through the majorities and the second largest groups of the respective types (see figures 5.27. – 5.34.):

<u>Found in 'Middle B': a few finds of *Casting sticks group 1*; *Casting sticks group 2*; *Dice*; *Balls*; *Cones* and *Gamesmen:*</u>

1. A few objects of *casting sticks group 1* (6 of 53 finds), located in 'Middle B', are found in one north-eastern part of block 10. One scattered find can be seen
2. A few objects of *casting sticks group 2* (4 of 37 finds), located in 'Middle B', are found in one north-eastern part of block 10. One scattered find can be seen

3. A few objects of *dice* (3 of 33 finds), located in 'Middle B', are found in the eastern part of the southern part of block 10. One scattered find can be seen
4. A few objects of *balls* (5 of 60 finds), located in 'Middle B', are partly found in the eastern part of the southern part of block 10. Two scattered finds can be seen
5. A few objects of *cones* (2 of 59 finds), located in 'Middle B', are found in the eastern part of the southern part of block 10
6. A few objects of *gamesmen* (2 of 30 finds), located in 'Middle B', are found in the north-eastern part of block 10 as well as in the eastern part of the southern part of block 10

Internal densities of 'Middle B':

(Due to the few finds of each type, possible 'exceptions' are not mentioned)

1. The few finds of *casting sticks group 1*: are mostly found within a limited area
2. The few finds of *casting sticks group 2*: are found within limited areas
3. The few finds of *dice*: are mostly found within a limited area
4. The few finds of *balls*: are partly found within limited areas
5. The few finds of *cones*: are found within a limited area
6. The few finds of *gamesmen*: are found within limited areas

Scattered features:

North:

Scattered finds and exceptions noted above:

- *casting sticks group 2*: four exceptions (one in block 2, one in block 2-3str, two in the southern part of block 3)
- *casting sticks group 1*: two exceptions (one north of block 2, one north of block 3)

Other scattered finds:

- *balls*: six (two north of block 2, one north of block 3, one in block 2, two in the southern part of block 3)
- *Dice*: three (one in the north-western part of block 3, two in block 2)
- *Tetrahedra*: one (in the southern part of block 3)

The area also includes a few more finds of balls and dice, as well as a few gamesmen. These are found within or close to the above noted cluster of the area and therefore not considered properly scattered

Middle A:

Scattered finds and exceptions noted above:

- *Casting sticks group 2*: one exception (in block 8-10str-block 8)

- *Dice*: two scattered finds (one in block 6, one in block 9)
- *Balls*: one exception (in block 8-10str-block 8)
- *Cones*: three scattered finds (one in block 2-5str-block 5, two in block 9)
- *Gamesmen*: one scattered find (in block 2-5str-block 5)

Other scattered finds:

- None reported

The area also includes a find of a tetrahedron. This is found within the localization noted above of the area with special concentration and therefore not considered properly scattered

<u>Middle B:</u>

Scattered finds noted above:

- C*asting sticks group 1*: one scattered find (in the western part of block 10)
- *Casting sticks group 2*: one scattered find (in the eastern part of the southern part of block 10)
- *Dice*: one scattered find (in the far eastern part of the southern part of block 10)
- *Balls*: two scattered finds (one in the far western part of the southern part of block 10, one in the south-eastern part of block 10)

Other scattered finds:

- None reported

<u>South:</u>

Scattered finds noted above:

- None reported

The area also includes a few finds of casting sticks group 1 and group 2. Since the area displays an evenly scattered appearance, these are not considered properly scattered

Most finds of all the listed types of the area 'Middle B' are found within one or two rather limited areas. Finds mentioned as 'exceptions' occur among casting sticks of both groups as well as among balls. Scattered examples of dice and balls occur within all areas except for the area 'South'.

Correlation of spatial distribution of (a) game-related registrations – (b) concentrations of game-related types – (c) 'other' game-related spatial features

When the results of *a*, concentrations of game-related registrations in relation to blocks, are considered with the results of *b*, concentrations of game-related types, correlations can be seen between different areas and different degrees of concentration.[153] Thus, the types that have their largest and second largest numbers located in the area 'North' contribute to the *markedly dense cluster* characterizing this area. The types with the largest and second largest groups in the area 'Middle A' mostly conform to the *limited space of particular concentration* of this area. The types with the largest number of finds in the area 'South' are to a large part spread out over more or less the whole area, providing the area with an *even appearance*. With the latter study, it has at the same time been possible to distinguish separate clusters within the even pattern of the area 'South': one markedly dense and street-located cluster (in the western part of the street between blocks 11 and 12); one markedly dense and spatially small cluster (in the northern part of block 12); one dense and spatially medium-sized cluster (in the south of block 12); and one medium dense cluster (in the east-south-east of block 12). The results of *c*, the identification of game-related finds of the area 'Middle B', as well as the distinguishing of more scattered features, can be suggested to strengthen some of the discernible patterns. They further the impression of the balls to be rather scattered. The dice appear rather scattered as well, and seem to turn up in somewhat 'odd' localities. The gamesmen do not seem to be particularly scattered. To a certain part, this also applies to the cones. The casting sticks of both groups have what could be named proper exceptions when considering the distinctly clustered appearance of most of the objects of these types. The few scattered examples can with this be proposed to strengthen the visible clusters, such as the one of the area 'North', and the cen-

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[153] At the same time can differences be seen since, in the first study, 'registrations' were considered, while 'finds' were studied in the second study. This may be most obvious in connection with the cluster seen in the area 'North'. This cluster does not stand out as noticeably when seen from the viewpoint of 'registrations'.

tralized character of the area 'Middle A'. Albeit of smaller sizes, centralized appearances like the one for the area 'Middle A' can be suggested for two localities in the area 'Middle B'. The difficulty in distinguishing any particularly scattered features in the area 'South' follows in line with the evenly spread appearance of this area.

Coda

By firstly searching for clusters in the different areas, secondly looking for clusters among the different types, and thirdly investigating the more scattered features of the spatial pattern, we can distinguish interesting differences in ***density*** *versus* ***dispersal****. This concerns both finds of the different types and finds in the different areas. We are aware of the uncertainty in exactness that is due to the rounding down and rounding up of the point coordinates. The various concentrations that we can see are in other words partly misleading. Considering the elbowroom which is offered by the complementary character of the three starting points, the concentrations may however be suggested as sufficiently 'certain' for our aim to accentuate specific data from which we can gain information about patterns of being left behind. The elbowroom can furthermore open up for thoughts concerning the theme in question. With our complementary data at hand, we may for example problematize the label 'scattered'.*

Are the relatively dispersed finds of the gamesmen to be seen as truly scattered, considering the fact that rather few examples of this type form into clusters? Is it possible to point out scattered finds of certain types, when these are found within localizations defined as 'limited space of particular concentration'? May, in other words, examples of different types, and/or from different areas, have different kinds of scattered features?

5.3.2. Coding and Comparison (horizontal aspects)
Starting from Material clusters →

On the basis of the differences in density/dispersal, it becomes of particular interest to have a closer look at the game-related types in regard to *where* and *how* they have been found. If objects of a certain type are shown to generally be of a rather scattered character, are they in that case to be seen as taken out of their contexts? Or is the scattered character in itself to be seen as their context? A sorting of the materials according to the idea of being left behind will in that case be able to show more deep going qualities among the different types. From this standpoint, it becomes of interest to see whether the types have clustered or outspread tendencies of other kinds as well. Starting (a) from the question where they have been found, the types will be compared with two selected, architectural features that seem 'strategic' concerning information on patterns of being left behind: streets and wells. This is the case since these features do not seem to be particularly suitable places for keeping or storing game-related materials. Finds that are found in connection to these features will accordingly be taken to indicate a specific kind of being 'left behind'; namely being lost or dropped, somehow taken out of their contexts:

- In which ways are the different types located in relation to architectural features that can provide clues to patterns of being left behind?

On the basis of the question how they have been found, the types will be compared with regard to aspects that can provide information about density. These aspects will on the one hand (b) be searched for in the way the finds have been registered. The number of registrations of each type that refer to more than one, single object will be re-considered, as well as the number of identical point coordinates within each type[154]:

[154] Due to de rounded figures, it is expected that some point coordinates will appear more than once among the registrations. Although this in contrast to registrations referring to more than one find is no indication that the finds in question have been

- What about the density of the different types in relation to ways in which they are registered?

On the other hand (c), they will be searched for in the information provided in the published excavation reports that concern patterns of distribution of the different types in question:

- What information can be derived from the published excavation reports as to the density of the different types?

The different studies will include all types of game-related finds. However, for the sake of clearness, and since not all results will appear equally significant, only three selected types will be presented here. Based on their differences in spatial pattern, the following types are suggested to be of particular interest for these inquiries: gamesmen, cones and casting sticks of group 1.

a. Game-related types in relation to selected architectural features

The relations of the selected game-related types to streets and to wells are studied with the help of the published plan of the area (see fig. 5.1.).[155] Due to the uncertainty inherent in the spatial distribution because of the point coordinates being rounded up or rounded down into even tens, it is especially noted whether an object is found 'in' or 'by' a street. A higher certainty can be proposed for objects found 'in' a street, since in most cases the possible radius within which the find could belong falls within the frames of the street in question (concerning the wells, very few finds turn up close to them, and none

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found together, this study can nevertheless give a hint as to whether the objects have been found in close proximity to each other.

[155] A concern for whether an object found in a street would actually derive from the street, or rather from within a drain, would involve a careful examination of the relation of layers of that particular spot. Since this was not within the frames of the formulated goal of this level, however, streets and drains were kept together as one architectural unit.

at all appear within them.[156] Relations to this architectural feature are therefore omitted from the presentation).

ADJACENCY OF SELECTED TYPES TO STREETS

Gamesmen (30 finds in total):

Found in street:	found by street:	street-located % of total finds:
1	2	3/30=10

Cones (59 finds in total):

Found in street:	found by street:	street-located % of total finds:
16	4	20/59=34

Casting sticks group 1 (53 finds in total):

Found in street:	found by street:	street-located % of total finds:
0	3	3/53=6

On the one hand it is to be noticed that none of the types display a particularly high percentage of finds derived from streets. On the other hand, it may be observed that cones are significantly more connected to streets than gamesmen or casting sticks are (it may at this point be noted that most of these examples derive from one and the same locality, situated in the western part of the street between blocks 11 and 12).

b. Density of game-related types according to forms of registration of the field register

Registrations referring to more than one single find, as well as point coordinates occurring more than once, are calculated as a percentage in relation to the totality of registrations of each type.

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[156] None of the point coordinates coincide with the minute circles denoting the wells on the plan. There is furthermore nowhere any mention in the field register that finds of the types discussed here have been found inside wells – which is indeed sometimes the case with other sorts of artefacts.

Type:	no. of plural reg. (%):	no. coord. more than once (%):
Gamesmen (29 reg.)	1 (3)	3 (10)
Cones (51 reg.)	5 (10)	10 (20)
Casting Sticks 1(40 reg.)	7 (18)	8 (20)

Gamesmen are seen to produce low percentages in both columns compared to the two other types. Casting sticks display the highest amount of registrations referring to more than one single object, that is, of objects found together. Casting sticks and cones show relatively equal numbers of identical point coordinates.

c. Density of game-related types according to the published excavation reports

Information concerning how the types corresponding to those discussed here were usually found is derived from both of the published excavation reports. The degree of information for different types varies, but is in general meagre. The information is recurrently found to relate to a few examples of the type rather than to the type as a whole:

Gamesmen
The type was previously suggested to correspond to (a) the type of gamesman labelled as 'cone with incurved sides'; (b) the type of gamesman labelled as 'straight-sided cone with definite head'; (c) the type of object labelled as 'stone pendant'/'pendant' (Mackay 1938d:571f, 1938e:522).

As concerns the type with incurved sides, Mackay suggests at least the ones of pottery as 'proved' to be gamesmen since some of these have been found together. This is exemplified with a group of four items found together (Mackay 1938d:572). The only thing that is said about the 'stone pendant'/'pendant' is that one example was found in a hoard of jewellery (Mackay 1938e:522). No information is provided for the straight-sided type of gamesman.

Cones
The type was previously suggested to correspond to (a) the type of gamesman labelled as 'round topped cone'; (b) the type of gamesman labelled as 'pointed cone'; (c) the type of gamesman labelled as 'straight-sided cone with definite head'; (d) the type of object labelled as 'small cone

with pointed top'/'small cone' (Mackay 1931f:476, 1938d:571, 1938f:409).

According to the first report, it is stated that gamesmen of the same material and shape have so far, and only occasionally, been found at most three items together. Two groups of three items each, all in shell, said to be found together, are included among the presented objects (being of the type labelled as 'round topped cone' in the later report) (Mackay 1931c:559, 1931f:478). As to the round topped type of gamesman of the later report, Mackay declares it as "/…/significant that no two of them were found together/…/" (Mackay 1938d:571). As above stated, no information is provided for the straight-sided type of cone. Information is also lacking for the 'pointed cone' and the 'small cone with pointed top'/'small cone'.

Casting sticks group 1

The type was previously suggested to correspond to (a) the type of object labelled as 'casting bone'/'casting stick'; (b) the objects that could be seen as sub-types to the casting bone/casting stick, labelled as 'round rod', 'ivory fish' and 'miscellaneous ivory object'; (c) occasional objects found under the diverse labels of 'awl', 'metal rod'/'kohl-stick', 'ivory baton', and 'hair-pin' (Mackay 1931c:556f, 1931e:531, 1931f:470, 1931h:504, 1938d:562ff, 1938e:538, 1938f:420, 432, 1938g:475).

Concerning the casting bones, as the casting sticks are labelled in the first report, it is said that these have sometimes been found two together, but "/…/ not always of the same shape and size, nor marked in the same way". A following footnote informs us that a set of three items was found in the DK area (Mackay 1931c:556 and footnote 2). No information on this matter is provided for any of the other types of objects.

The information mainly provide us with aspects that concern whether the objects appeared as single finds or were found together with other items of the same type. Casting sticks differ from the other types in being occasionally found in groups of two or perhaps sometimes three items. As to the cones, it is noteworthy that the type of gamesmen shaped as a rounded cone seems more often than not to have been found as single examples. Such a picture seems suggestible for the gamesmen as well, although some pottery examples are mentioned as found together in small groups.

Correlation of (a) selected architectural features – (b, c) density

Are items found in connection with streets to be seen as scattered in the sense of being taken out of context? As seen, noteworthy differences appear in the number and kind of street-connected finds. A large number are made up of *cones*. Is this type therefore to a higher degree 'deprived of context' than other game-related finds? If we proceed to the variables concerning registrations referring to plurality and identical point coordinates, we see that the cones tend to appear quite close together. The excavation reports inform us at the same time that the type of gamesman shaped as a rounded cone is generally found as single examples. This recalls the scattered, even character of the area 'South', with finds originating from different blocks as well as streets. Since the cones themselves constitute the main contributor to this pattern – we remember their overwhelming concentration in this area, and the medium dense cluster and the scattered features that characterized them – we distinguish what could be called a certain character for this type. This character could be described as being of a partly single, partly clustered, while at the same time spatially confined appearance. In light of this picture, the cones found in or by streets, or for that part all cones found here and there within this area, appear in this context not as particularly dispersed, but rather as parts of the particular pattern of this type of object. One could perhaps wonder at the noticeably dense cluster of cones in the western part of the street between blocks 11 and 12. Do these specimens, in their oddness, constitute truly scattered cones? In light of the character defined for the cones, it could on the other hand be proposed that truly scattered examples of cones are made up of those few finds that are found outside the area 'South'. At the same time, we see that the few cones found in the area 'Middle A' are found within – that is, conform to – the limited, concentrated space defined for this area. They also display a similar, scattered appearance as in the area 'South', only in much smaller numbers. Few *gamesmen* are found in connection with streets. It is only in one case that two examples have been found together. According to the excavation reports, finds of this type seem occasionally (and at least when made of pottery) to have been found in small groups. Such a pattern may perhaps be seen in the spatially small cluster of gamesmen found in the north of block 12

in the area 'South'. Considering all the different variables, we may discern a character for the type that could on the one hand be described as largely single in appearance. On the other hand, we cannot define the type as scattered 'everywhere', such as in streets or in odd localities. Rather, the type gives the impression of 'forming part of'. It is found within or close to the cluster defined in the area 'North'; within the limited space of particular concentration seen in the area 'Middle A'; and within the small-sized groups in the area 'Middle B'. In light of this, examples being 'deprived of context' may possibly be those few gamesmen that are indeed found in or by streets, or those specimens that do not 'form part of'. Remarkably few *casting sticks of group 1* are found in or by streets. The type displays the highest number of registrations that refer to more than one, single find, as well as a distinct number of point coordinates occurring more than once. This pattern may be further confirmed by the information of the excavation reports that states that pairs of casting sticks found together are not an unusual sight. As has been shown, a noticeable majority of casting sticks are found close together within the limited space of particular concentration in the area 'Middle A'. A smaller group forms part of the markedly dense cluster in the area 'North'. While found in places where the majorities of other game-related objects are not found, and providing the most non-scattered picture of the three types being discussed, the items stand forward as of a markedly clustered and separated character. Accordingly, those few examples found outside the concentrations can be suggested to be 'deprived of context'. This label could perhaps also be given to those few casting sticks that may be defined to 'form part of', since this cannot be said to be the case with the majority of the finds.

Coda

We have compared variables that in different ways may provide information concerning density/dispersal. Based on this comparison, the materials can be sorted into what we now may call ***firm/loose*** *finds. The concept stands forward as more complex than deposited versus scattered finds, since loose finds need not generally be the same as 'lost' or in other ways context-deprived objects. While for example casting sticks defined as loose may be regarded as 'deprived of context', cones with the same definition appear as*

much more context-bound. Rather than denoting any static, oppositely characterized definitions, the concept stands forward as a flexible tool in the sorting process. This way of thinking thus provides us with insights into different characters of the different types. With this view, we can attain other kinds of distinctions, expressed in ways such as ***forming part of****, or* ***separated****. These expressions can in turn be described as tools, flexible and type-adjustable in shape.*

Considering this information from a vertical direction, the question arises whether the particular characters of the different types will 'continue' and, so, become more pronounced.

5.3.3. Comparison (vertical aspects)
Starting from Temporal clusters →

As was earlier discussed, vertical comparisons must be treated with caution, and may only provide limited information. Nevertheless, a comparison of depth intervals will be ventured to reach a more proportional, three-dimensional form of the pattern of being left behind. In more tangible words, repetitive tendencies of clustered or scattered appearance will be looked for through a vertical search. The above studies that concern spatial concentrations as well as connections to streets will here be compared with notions on depth:

- What happens with the differently defined, type- and area related densities and scattered features when considered from a vertical direction?

The comparison will start by considering depth intervals of the different types in relation to the spatial concentrations of the types (the concentrations labelled as 'majorities' and 'second largest groups' of each type). Thereafter, depth intervals will be observed for the street-connected finds of each type (the types under discussion will be of the same kinds as selected above).

a. Depth intervals of game-related types in relation to spatial concentrations

The previous, more general consideration of tendency of depth of each type is now regarded in combination with the above definitions of spatial concentrations. This is done in order to relate depth intervals of the types under discussion to their respective, spatial concentrations. For best overview, selected parts of previous tables (*5.2.4.b* from 'Basement' and *5.3.1.b* from above) are put together according to type and ending with comparisons of intervals. (see fig. 5.27.; fig. 5.28.; fig. 5.29.; fig. 5.33)

GAMESMEN
Finds mostly appear within the interval 0-1 metres and thereafter the interval 1-2 metres
The finds making up the 'majority' in the area 'South' appear equally within the interval 0-1 metres and the interval 1-2 metres

<u>Internal densities/scattered features in 'Middle A' (8 of 30 finds):</u>
The few items of this group are mostly found within the limited space of particular concentration

<u>Internal densities/scattered features in 'South' (16 of 30 finds):</u>
1 markedly dense, numerously medium-sized, spatially small cluster in the north of block 12; a slight majority of scattered features within a large area

<u>Depth intervals in relation to concentrations:</u>
'Middle A': a majority is found within the interval 0-1 metres. Objects within the limited space of particular concentration are mostly found within the interval 0-1 metres; thereafter the interval 1-2 metres
'South': objects within the small cluster in the north of block 12 are mostly found within the interval 0-1 metres. Scattered features are mostly found within the interval 1-2 metres

CONES
Finds mostly appear within the interval 2-3 metres, thereafter the interval 1-2 metres and thereafter the interval 3- metres. Fewer appear within the interval 0-1 metres

The finds making up the ’majority’ in the area ‘South’ mostly appear within the interval 2-3 metres, thereafter the interval 3- metres and thereafter the interval 1-2 metres. Fewer appear within the interval 0-1 metres

Internal densities/scattered features in ‘Middle A’ (6 of 59 finds):
The few items of this group are mostly found within the limited space of particular concentration

Internal densities/scattered features in ‘South’ (51 of 59 finds):
1 markedly dense, markedly numerous, spatially medium-sized cluster in and around one part in block 11-12str western part; 1 medium dense, numerous, spatially large cluster in the south-eastern part of block 12; mostly scattered features within a large area

Depth intervals in relation to concentrations:
‘Middle A’: found in equal numbers within the interval 0-1 metres and the interval 1-2 metres
‘South’: Objects within the dense cluster in the western part of block 11-12str are mostly found within the interval 3- metres; a few are found within the interval 0-1 metres. Objects within the medium dense cluster in the south-eastern part of block 12 are mostly found within the interval 2-3 metres; thereafter the interval 1-2 metres. Scattered features are mostly found within the interval 2-3 metres; fewer are found within the interval 0-1 metres; fewer still are found within the interval 1-2 metres

CASTING STICKS GROUP 1
Finds mostly appear within the interval 0-1 metres, thereafter the interval 1-2 metres and thereafter the interval 2-3 metres
The finds making up the ’majority’ in the area ’Middle A’ mostly appear within the interval 0-1 metres, thereafter the interval 1-2 metres and thereafter the interval 2-3 metres

Internal densities/scattered features in ‘North’ (9 of 53 finds):
1 markedly dense, numerous, spatially medium-sized cluster within the markedly dense cluster; with exceptions

Internal densities/scattered features in ‘Middle A’ (33 of 53 finds):
1 dense, markedly numerous, spatially large cluster within the limited space of particular concentration

<u>Depth intervals in relation to concentrations:</u>
'North': a majority is found within the interval 0-1 metres; thereafter the interval 1-2 metres. Objects within the marked cluster are found within the interval 0-1 metres. Exceptions are found within the interval 1-2 metres
'Middle A': Objects within the limited space of particular concentration are, in the southern part, mostly found within the interval 2-3 metres; thereafter the interval 1-2 metres and the interval 0-1 metres. In the northern part, they are mostly found within the interval 0-1 metres; thereafter the interval 1-2 metres

Depth intervals are seen to differ both in relation to types and to spatial concentrations. The gamesmen display a relatively larger number found within the interval 0-1 metres in the defined space in the area 'Middle A' than in the area 'South'. Gamesmen found within the interval 0-1 metres are at the same time dominating in the small cluster in the area 'South'. The cones are represented in all depth intervals. There are no examples belonging to the intervals 2-3 metres or 3- metres in the area 'Middle A', however. These are found in the southern area, where finds appearing within the interval 2-3 metres constitute the majority. All examples found within the interval 3- metres are concentrated to the cluster in the western part of the street between blocks 11 and 12. The cluster of casting sticks of group 1 in the area 'North' is found within the interval 0-1 metres, while the exceptions are found within the interval 1-2 metres. There are no examples found within the interval 2-3 metres in the area 'North'. In the defined space of the area 'Middle A', a division can be noted with casting sticks belonging to the interval 2-3 metres dominating in the southern part and casting sticks belonging to the interval 0-1 metres in the northern part.

b. Depth intervals of game-related types in relation to streets

Designations of depth are taken into regard for each find earlier selected for showing a connection to streets. Depth intervals are added to the right of the original table.

GAMESMEN (30 finds in total):

Street-located % of total finds:	Depth intervals:
3/30=10	one 0-1 metres; two 1-2 metres

CONES (59 finds in total):

Street-located % of total finds:	Depth intervals:
20/59=34	four 0-1 metres; one 1-2 metres; fifteen 3- metres

CASTING STICKS GROUP 1 (53 finds in total):

Street-located % of total finds:	Depth intervals:
3/53=6	three 0-1 metres

The majority of cones that have a connection to streets belong to the interval 3- metres. If this large number is taken aside there is a slight dominance of finds in the interval 0-1 metres. No finds appear belonging to the interval 2-3 metres.

Correlation of (a) depth intervals of game-related types in relation to spatial concentrations – (b) depth intervals of game-related types in relation to streets

With the adding of vertical aspects, the repetitive differences noted for the types can be suggested to become strengthened. The small number of specimens connected to streets may also become somewhat more regulated. If the large number of cones belonging to the interval 3- metres are taken aside, the finds point to a slight dominance of finds found in the interval 0-1 metres. A general trend can be noted in that finds belonging to the interval 0-1 metres dominate in the area 'North', but are fewer in number when moving southwards while finds found within the interval 1-2 metres increase in number. This trend may be best represented by the *gamesmen*. This can be suggested to strengthen the earlier noted quality of the gamesmen to 'form part of'. What stands out as somewhat 'deprived of context' may possibly be the single cluster of gamesmen in the northern part of block 12. Belonging to the interval 0-1 metres, it does not follow the successively more deep-going trend, and it appears in sharp contrast to the closely but more deeply located cones. The cluster may on the other hand be taken to strengthen a general tendency towards the

interval 0-1 metres for the gamesmen as type. As concerns the *cones*, we see a distinct number of examples in the area 'South' that belong to the interval 2-3 metres. This conforms to the general trend of successively deeper depth intervals. At the same time, and in light of the absence of gamesmen belonging to the interval 2-3 metres in the same area, this may be taken to strengthen the closely connected character noted for the cones. This character may also be strengthened when considering that casting sticks also have examples belonging to the interval 2-3 metres, but found in a totally different area (the area 'Middle A'). The few cones found within the intervals 0-1 metres and 1-2 metres in the area 'Middle A' may on the one hand 'fit' into this location as a whole. On the other hand, they may be suggested as 'deprived of context' in comparison with the number of cones belonging to the interval 2-3 metres. This also applies to the few cones found within the intervals 0-1 metres and 1-2 metres in the area 'South'. As concerns the cluster of cones originating from the western part of the street between blocks 11 and 12, and mainly belonging to the interval 3- metres, this may similarly be taken as a kind of exception. It may also, however, be seen to strengthen a tendency for deeper depth intervals for this type. *Casting sticks of group 1* follow the general trend in that examples are mainly found within the interval 0-1 metres in the area 'North', but to a large part found within the interval 1-2 metres in the area 'Middle A'. Considering that other game-related finds in the area 'Middle A' belong to the intervals 0-1 metres and 1-2 metres, however, the examples of casting sticks found here that belong to the interval 2-3 metres may at the same time be taken to strengthen the secluded character of this type. The noted exceptions in the area 'North' may become more pronounced since these in contrast to the majority of casting sticks, which belong to the interval 0-1 metres, are all found within the interval 1-2 metres. To sum up, the comparison with vertical aspects does not make the types under study seem more mixed. On the contrary, we discern what can be suggested as more firm tendencies that strengthen the distinct characters of the different types.

Coda

*Through the study of vertical aspects, the characters of the different types have become more pronounced. For one part we can discern three-dimensionally formed, secluded tendencies, which we may call **firmnesses**. For another part, we can distinguish tendencies of 'forming part of', which we may label **intertwined features**. On these grounds the repetitive differences and similarities can be grouped into what we may call **repetitive tendencies**, **formal variations** and **exceptions**:*

***Repetitive tendencies** – can be concluded for the major part of finds under study, since they are distributed in ways that conform to the distinct concentrations of the different areas. Such tendencies can also be noted for the major part of the three game-related types in question, displaying different spatial concentrations, respectively.*

***Formal variations** – appear when we compare the characters of the game-related types with each other. Formal variations also appear when we compare the characters of the area-related concentrations with each other.*

***Exceptions** – are the features that to different degrees differ from the above, repetitive tendencies:*

- *The clustered group of gamesmen belonging to the interval 0-1 metres in the area 'South'. This is considered an exception because of the more deeply going trend of this area and the more outspread, single appearance of gamesmen in general*
- *The deep and dense cluster of cones found in a street. This emerges as an exception when taking into account that most cones are not found in streets, not originating from the interval 3- metres, and not found so densely clustered*
- *The few cones found outside the area 'South' and the few cones belonging to the intervals 0-1 metres and 1-2 metres. This is seen as an exception since the majority of cones originate from the area 'South' and belong to the interval 2-3 metres*
- *The few scattered finds of casting sticks, labelled as exceptions, because of the markedly clustered appearance of this type*

As is to be seen, the exceptions correspond to the examples that were suggested to be in different ways 'deprived of context'. We thus arrive at a very limited number of finds that fit into this description.

So how can we answer the question of which spatial patterns we are looking at in regard to the question of being left behind?

5.3.4. Conceptualisation Starting from Temporal clusters →

The game-related finds have been spatially studied with regard to different aspects of density/dispersal. However, we have managed to move away from a problematic search for fixed definitions. Instead, the particular inquiry has become a way of approaching the spatial distribution despite factors of uncertainty. It has led us to see more deep-going *characters* of the different, game-related types. As shown above, the number of finds that end up with the description 'deprived of context' appear as small in number. This is because the main point has moved away from individual cases to concern repetitive tendencies and formal variations in the spatial pattern as a whole.

Summary of some results:

- Spatial locations that harbour different game-related types have different *characters*: 'North' has a markedly dense cluster; 'Middle A' has a limited space of particular concentration; 'South' has an even appearance (within which small clusters can be distinguished)
- Different game-related types display different kinds and degree of *dispersal*. Balls have scattered features; Dice have scattered features and are found at somewhat odd localities; Gamesmen are without particularly scattered features; Cones are to a certain part without particularly scattered features; Casting sticks of both groups have a noticeably limited appearance of scattered features with a few exceptions
- Two of the game-related types under study (Casting sticks of group 1 and Gamesmen) do not in general appear in large numbers in connection to *streets*. Cones are significantly more connected to streets
- The game-related types under study (Casting sticks of group 1, Cones and Gamesmen) have different, *spatial characters*: Casting sticks of group 1 has a markedly clustered and separated character; Cones have a partly single-, partly clustered-, while at the same time spatially confined character; Gamesmen have a largely single, spatially 'forming part of'-like character

Summary of some results (continued):

- The game-related types under study (Casting sticks of group 1, Cones and Gamesmen) have different tendencies concerning *depth intervals*: Casting sticks of group 1 have a tendency towards the interval 0-1 metres, followed by the interval 1-2 metres; Cones have a tendency for deeper intervals (the intervals 1-2 metres, 2-3 metres and 3- metres); Gamesmen have a tendency for shallower interval (the interval 0-1 metres)

Summary of method:

<u>Collection</u>: Clusters within the different types have been searched for through the concept of *density/dispersal*. An elbowroom has been possible to obtain with the use of three starting points. Specific data has been possible to sort out with the aim of getting information concerning patterns of being left behind. The expression 'scattered finds' has become possible to problematize.

<u>Coding and comparison (horizontal aspects)</u>: Based on three variables, the materials can be suggested to become sorted into *firm/loose* finds. This more abstract concept appears as a tool in the sorting. With the help of this, we have been able to avoid steering our search into static, fixed definitions. Rather, focus has been directed on repetitive, abstract patterns, from which we have gained insight into different characters of the game-related types. We have been able to distinguish these as well as relate them to each other by using concepts like *forming part of* as well as *separated*, which again can be regarded as tools.

<u>Comparison (vertical aspects)</u>: From the point of view of the previously mentioned concepts *forming part of* as well as *separated*, we have proceeded to look at vertical aspects. By this investigation, the repetitive, abstract patterns, as well as the pictures of the characters of the types that these have been able to point out, have become deepened. The characters have become possible to distinguish as well as to relate according to secluded tendencies (*firmnesses*) as well as 'forming part of'-tendencies (*intertwined features*); concepts which appear as new kinds of tools. Based on this, we have made a distinction of the materials into *repetitive tendencies*, *formal variations* and *exceptions*. In the end we have a significantly small number of finds (labelled as exceptions) that can be designated as 'deprived of context'.

With the concepts *firmnesses* and *intertwined features*, the question about deposited versus dispersed features among the individual types can by now be suggested to fade away. Instead, the focal point can be

said to concern the different concentrations and their compositions and connections. The different concentrations can now be studied as *game-related places*, both literally (places for game-related activities), and symbolically (places that similar to play and gaming appear as changeable, depending on the point of view one takes on when studying them).

5.4. Delineating game-related places through composite entities: searching for pattern (Level 2)

In the previous level, focus was centred on the game-related types and what the examples of the different types could represent in terms of being left behind – deposited or scattered objects. By use of the concepts *firmnesses* and *intertwined features*, through which *repetitive tendencies*, *formal variations* and *exceptions* could be distinguished, the previous level ended with a shift of the focal point. It now became directed towards a search for specific compositions of the spatial pattern. It was suggested that these could be seen as *game-related places*. With this point of view, we now direct our study on *connections*, both inwards and outwards, in order to illuminate composite entities through which we may delineate such places. We may start from two basic questions:

- Where are these game-related places situated (in regard to find- and structural contexts)?
- When are these game-related places situated (in regard to ‘length’ of depth intervals)?

5.4.1. Collection of data
Starting from Spatial clusters →

A consideration for linked up, composite entities will require an analysis of more in-depth character than was the case in the previous levels. Data will therefore be collected following the idea that continued analysis and inquiry only will regard chosen parts of the

material; those parts that due to their specific qualities are especially illustrating. The collection will be focused on the previously defined and discussed concentrations. The concentrations of the areas 'Middle A' and 'South' will however be divided into smaller concentrations on grounds of their internally different appearances. In the area 'Middle B', the small concentration noted for the southern part of block 10 will be omitted due to space- and time limits. The concentrations will be studied and lifted forward on the basis of three criteria. These will be focused on more detailed, structural features, as well as on density and character when taking into consideration all types of game-related objects which the concentrations consist of. The block-based concentrations will in line with this come to be analysed according to (a) locations in relation to block borders and/or rooms:

- What happens with the previously established concentrations when approached from more detailed structural insights?

(b) appearance of density:

- What about the nature and degree of closeness of game-related objects within the different concentrations?

(c) composition of game-related types:

- What kinds of game-related types do the concentrations consist of?

The loss of accuracy caused by the rounding up or rounding down of point coordinates will through the more narrowed approach become more pronounced. Localities 'inside' or 'outside' particular rooms can accordingly not be taken for certain. It must however be recalled that prime focal point will not be directed on 'exact' information, but on formal patterns made up by a number of details.

a, b, c. Concentrations of game-related types in relation to block borders and/or rooms; in relation to density; in relation to composition of game-related types

The finds of the concentrations are marked out on the plan of the area (see fig. 5.1.). The concentrations are thereafter studied in relation to block borders and/or rooms. Possible connections to streets and wells are also noted. The concentrations are furthermore studied in relation to density when taking into account the total number of game-related objects of which they consist. Lastly, they are studied in relation to the composition of game-related types. For best overview, the three inquiries are grouped under the same heading. The concentrations are listed under the previously established areas.

<u>North:</u>

1. *Concentration 'bl 3-4'* (previously presented as 'markedly dense cluster'):
   Situated on and around the border of blocks 3-4: in a north-eastern part of block 3; in a north-western part of block 4 (fig. 5.35.).
   <u>Block borders/rooms:</u> 1 block border (bl 3-4). Few rooms. In block 3 situated within and along the walls of the northern and north-eastern parts of a large room (room 5), bordering small rooms to the north, as well as within and along the walls of a medium-sized room north-east of the large one. In block 4 situated in the north-western part of a large area south of a small room (room 2). In-between blocks 3-4 situated in the northern part of the north-south going small street in-between these blocks.
   <u>Density:</u> a total of 38 game-related objects contribute to a markedly dense, markedly numerous, spatially medium-sized appearance; densest part in the middle and eastern part; loosened appearance in the western part.
   <u>Composition of game-related types:</u> mostly casting sticks group 2 (26 finds); second mostly casting sticks group 1 (7 finds). Thereafter balls (7 finds); gamesmen (4 finds) and dice (1 find). The densest part includes almost all casting sticks of both groups and some balls and gamesmen. The more loosened appearance includes balls, gamesmen and dice.

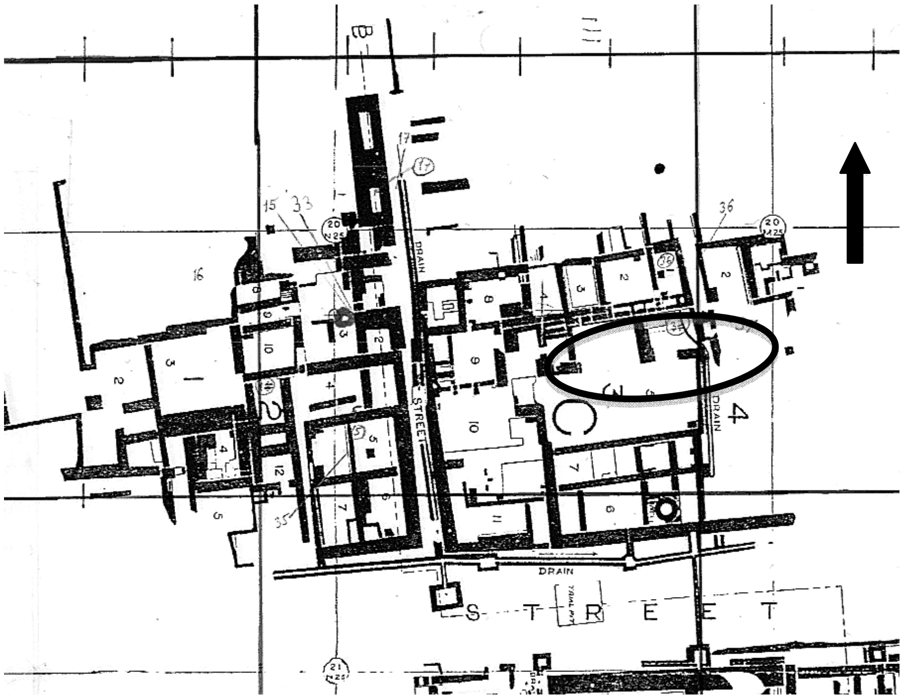


Fig. 5.35. A section of the plan of the DK-B and C areas, displaying the concentration 'bl 3-4' (from Marshall 1931a:Plate LXII).

<u>Middle A:</u>

(The concentration here was previously presented as 'limited space of particular concentration'. A closer look reveals that this consists of a larger part in the centre of the area as well as a smaller part to the north-west. The larger part and the smaller part will here be presented as two different concentrations due to their different appearances)

2. *Concentration 'bl 5 north-west'* (smaller part of what was presented as 'limited space of particular concentration')
   Situated in the northern and north-western/western parts of block 5 (fig. 5.36.).
   <u>Block borders/rooms:</u> No block borders. The northern part is situated within the northern part of one large room (room 4), within a compound of larger rooms; the north-western/western part is situated within and along the walls of medium-sized rooms/areas and a larger area south of these, all situated west of the compound. The northern parts are situated close to/by the east-west going large

street bordering block 5 in the north. The north-western part includes a north-south going small street within block 5.
Density: a total of 12 game-related objects contribute to a markedly outspread, small in number, spatially large appearance.
Composition of game-related types: mostly casting sticks group 2 (5 finds); thereafter balls (3 finds); gamesmen (3 finds) and cones (1 find). Objects found close to/by the large street: 1 ball; 1 gamesman; 1 cone. Objects found in connection with the small street: 3 casting sticks.

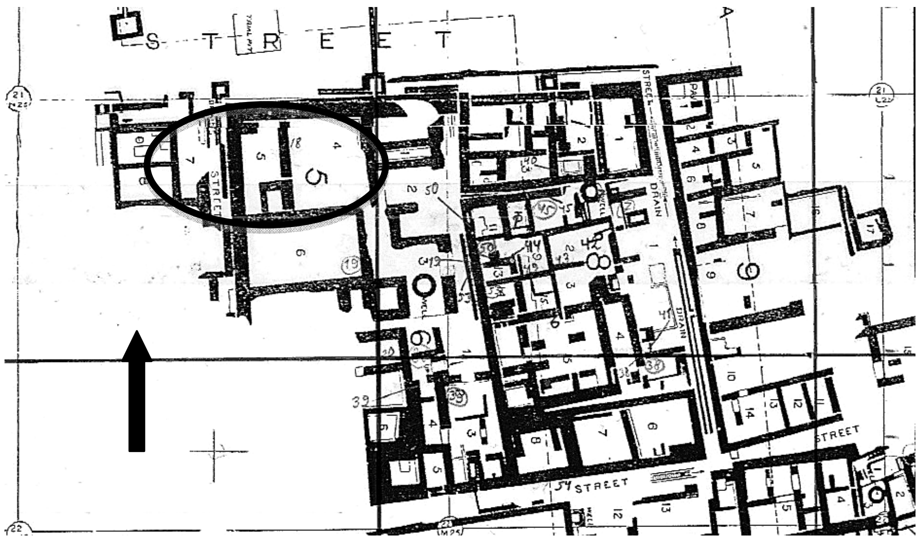


Fig. 5.36. A section of the plan of the DK-B and C areas, displaying the concentration 'bl 5 north-west' (from Marshall 1931a:Plate LXII).

3. *Concentration 'bl 5-7-8'* (larger part of what was presented as 'limited space of particular concentration')
Situated on and around the borders of blocks 5-7-8: the eastern-most side of block 5; the western and central side of block 7, southern and central parts; the western and central side of block 8, northern and central parts (fig. 5.37.).
Block borders/rooms: 3 block borders (bl 5-7; 5-8; 7-8). A large number of rooms. In block 5 situated in an extended area along the borders of blocks 7 and 8 that includes a somewhat larger room (room 2). In block 7 situated within and along the walls of three small rooms (chambers); in block 8 situated within and along the walls of about nine small rooms (chambers) in the northern part, as

well as within and along the walls of one large room in the central part (room 5). The south-western fringe borders on block 6. Includes two wells, one in the south-western fringe and one in the north-eastern fringe.
<u>Density:</u> a total of 65 game-related objects contribute to a dense, markedly numerous, spatially large appearance; a somewhat less dense appearance in the southern and northern fringes, as well as near to the wells.
<u>Composition of game-related types:</u> mostly casting sticks group 1 (33 finds); thereafter balls (12 finds); casting sticks group 2 (6 finds); dice (5 finds); gamesmen (5 finds); cones (3 finds) and tetrahedra (1 find). The central/southern part of the constellation includes most of the casting sticks of both groups. The central/northern part of the constellation includes most of the other kinds of game-related objects.

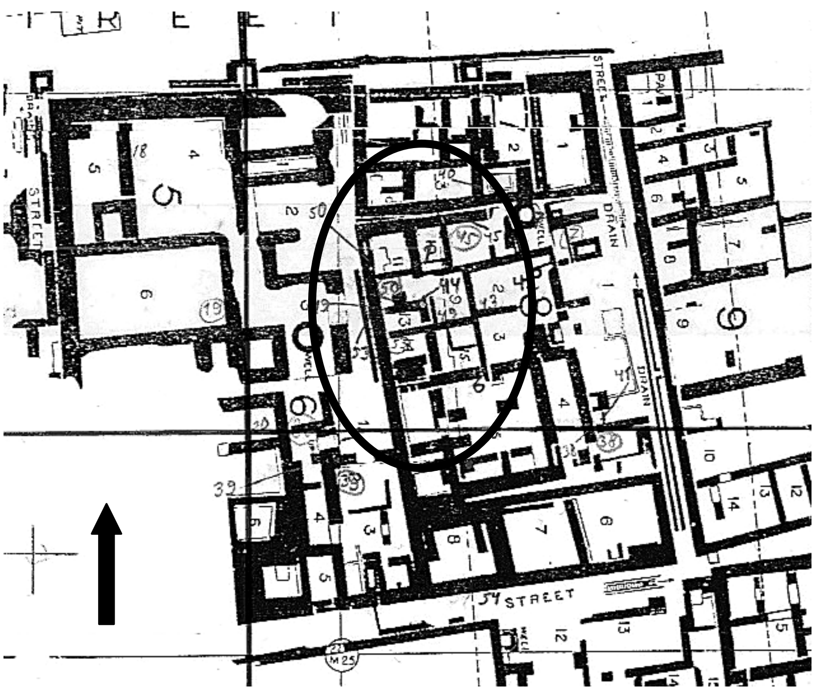


Fig. 5.37. A section of the plan of the DK-B and C areas, displaying the concentration 'bl 5-7-8' (from Marshall 1931a:Plate LXII).

<u>Middle B:</u>

4. *Concentration 'bl 10 north-east'* (previously presented as one of two, small-sized 'limited spaces of particular concentration')
   Situated in the north-east of block 10 (fig. 5.38.).
   <u>Block borders/rooms:</u> No block borders. A few rooms. Situated along the walls of about 4-5 small chambers (room west of room 4; at the border of rooms 4 and 3; room north-west of room 6; area just south of room 2). Includes a well in the north-eastern fringe.
   <u>Density:</u> a total of 9 game-related objects contribute to a dense, numerously small and spatially medium-sized appearance.
   <u>Composition of game-related types:</u> mostly casting sticks group 1 (5 finds); thereafter casting sticks group 2 (3 finds) and gamesmen (1 find).

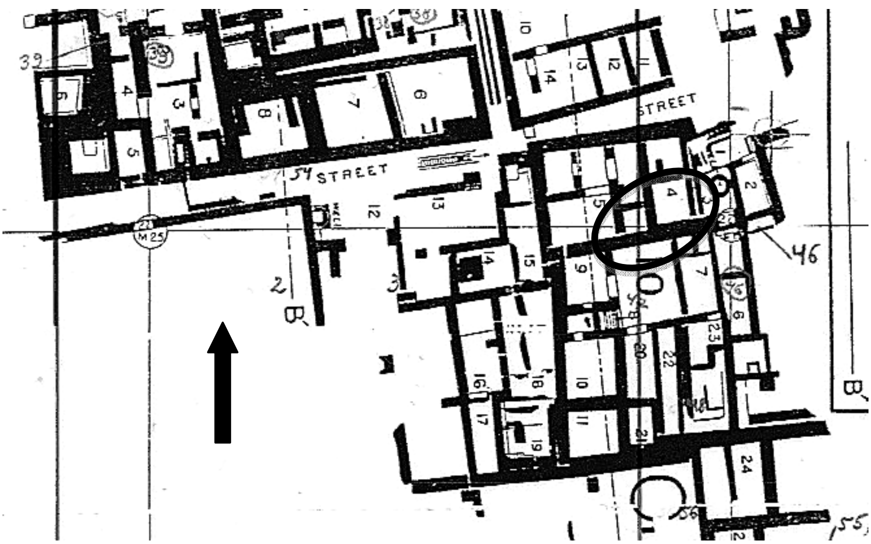


Fig. 5.38. A section of the plan of the DK-B and C areas, displaying the concentration 'bl 10 north-east' (from Marshall 1931a:Plate LXII).

<u>South:</u>

(The concentration here was previously presented as an area of 'even appearance'. As can be seen on the plan and as was previously noted as local clusters, different sub-concentrations can be distinguished within this area. These will here be presented separately due to their different appearances)

5. *Concentration 'bl 12 r10'* (local cluster of what was presented as an area of 'even appearance'; separately labelled as 'markedly dense, spatially small')
   Situated in the northern part of block 12 (fig. 5.39.).
   <u>Block borders/rooms:</u> no block borders. Only one room. Situated within the north-eastern part of a large room (room 10). The room borders the east north-east-west south-west going street in the north.
   <u>Density:</u> a total of 11 game-related objects contribute to a markedly dense, numerously medium-sized, spatially small cluster; less dense towards the western side
   <u>Composition of game-relatedtypes:</u> mostly gamesmen (8 finds); thereafter dice (3 finds).

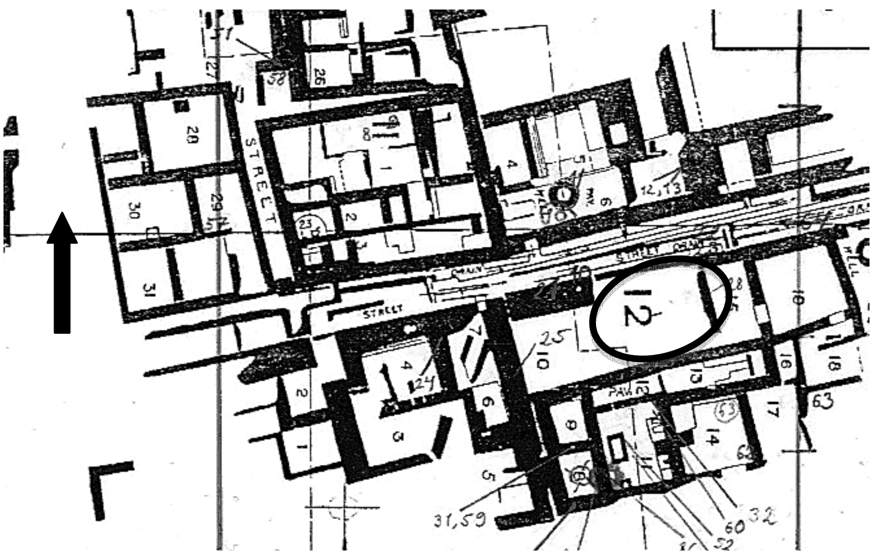


Fig. 5.39. A section of the plan of the DK-B and C areas, displaying the concentration 'bl 12 r10' (from Marshall 1931a:Plate LXII).

6. *Concentration 'bl 12 south'* (local cluster of what was presented as an area of 'even appearance'; separately labelled as 'dense, spatially medium-sized')
   Situated in the southern part of block 12 (fig. 5.40.).
   <u>Block borders/rooms:</u> no block borders. A number of rooms. Situated within and along the walls of four rooms forming an east-west going file, as well as south of these rooms. At the western end, it is situated on the border of two small rooms (rooms 9 and 8). It thereafter extends across a medium-sized room (room 11). Its eastern end is

within the walls of the following room, of medium-size, as well as just south of this room (room 14; here it shares location with the concentration 'bl 12 south-east').
<u>Density:</u> a total of 19 game-related objects contribute to a dense, numerously and spatially medium-sized appearance; less dense appearance in the south-west.
<u>Composition of game-related types:</u> mostly dice (7 finds); thereafter cones (5 finds); gamesmen (3 finds); balls (2 finds); casting sticks group 1 (1 find); casting sticks group 2 (1 find). The south-western fringe is composed of the two casting sticks.

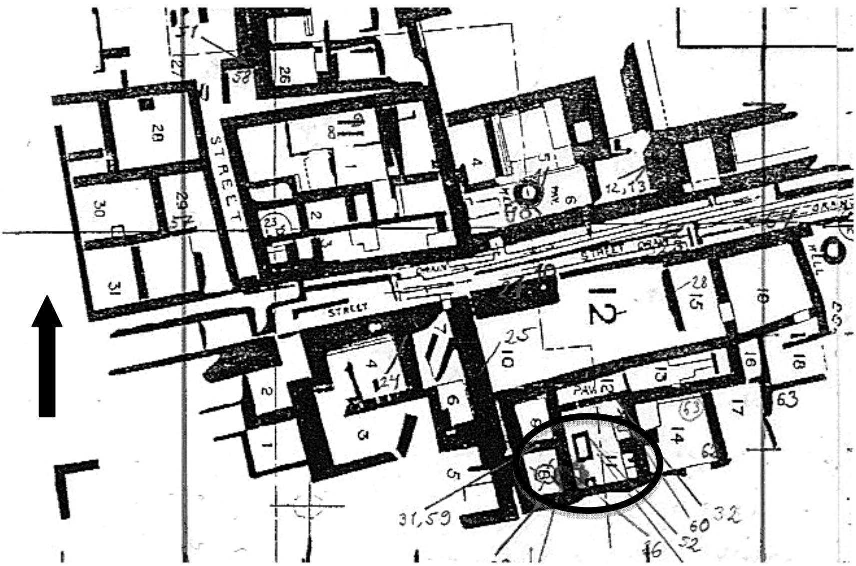


Fig. 5.40. A section of the plan of the DK-B and C areas, displaying the concentration 'bl 12 south' (from Marshall 1931a:Plate LXII).

7. *Concentration 'bl 12 south-east'* (local cluster of what was presented as an area of 'even appearance'; separately labelled as 'medium dense') Situated in the south-eastern part of block 12 (fig. 5.41.).
<u>Block borders/rooms:</u> no block borders. Large number of rooms. The outermost points are, in the north-east, the border to the eastern-most room of the block (east of room 19); in the north-west, the south-eastern part of a large room in the north of the block (room 10); in the south-west, the south-western part of a medium-sized room as well as just south of this room (room 14; here it shares location with

the concentration 'bl 12 south'). Within this area, it is situated along the walls of a further number of small and medium-sized rooms, as well as just south of the south-eastern part of the block. Two exceptions are two oblong, narrow chambers in the middle of this area, which have no game-related finds (rooms 12 and 13). The concentration includes a well in the north-eastern fringe.
Density: a total of 25 game-related objects contribute to a medium dense, numerous and spatially large appearance.
Composition of game-related types: mostly cones (14 finds); thereafter dice (4 finds); gamesmen (3 finds); balls (3 finds); tetrahedra (1 find). The south-eastern fringe of the area is composed of two dice.

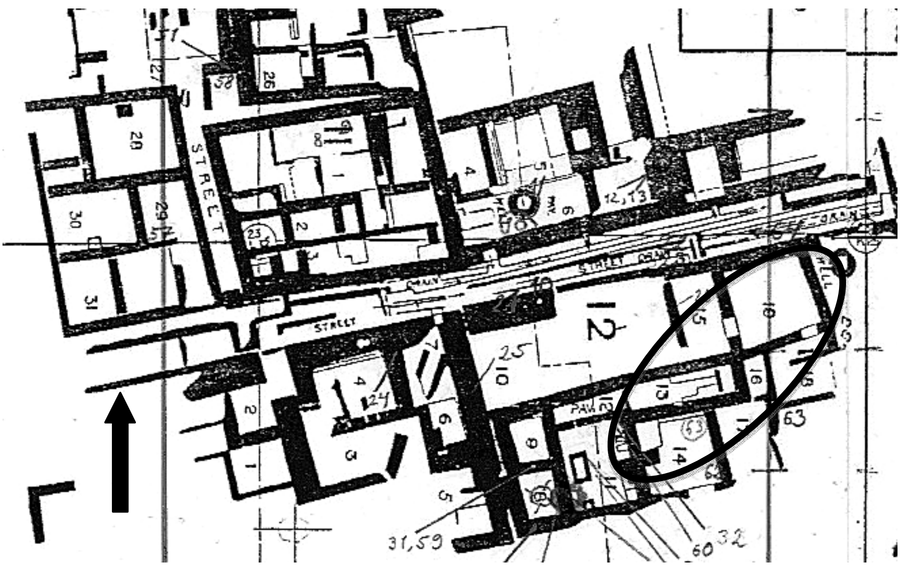


Fig. 5.41. A section of the plan of the DK-B and C areas, displaying the concentration 'bl 12 south-east' (from Marshall 1931a:Plate LXII).

8. *Concentration 'bl 11-12str'* (local cluster of what was presented as an area of 'even appearance'; separately labelled as 'markedly dense, street-located')
Situated in, by and close to the west south-western part of the street going in east north-east-west south-west direction between blocks 11 and 12. This includes the south-western part of block 11 and the north-western part of block 12 (fig. 5.42.).

<u>Block borders/rooms:</u> 2 block borders (part of bl 11; part of bl 12). Located in street but includes parts of a few rooms. Situated in the west south-western end of the street. In block 11 situated in the southern part of two medium-sized rooms bordering the street in the south (room 31 and part of room 29), within a compound that forms the westernmost part of the block. In block 12 situated in an area west of a middle-sized room (room 2).
<u>Density:</u> a total of 29 game-related objects contribute to a markedly dense, markedly numerous, spatially medium-sized appearance; the southern part, within the border of block 12, is of a much less dense appearance with only one object.
<u>Composition of game-related types:</u> mostly cones (20 finds); thereafter balls (9 finds). The street includes most of the cones. The part inside block 11 includes most of the balls. The single item within block 12 is a ball.

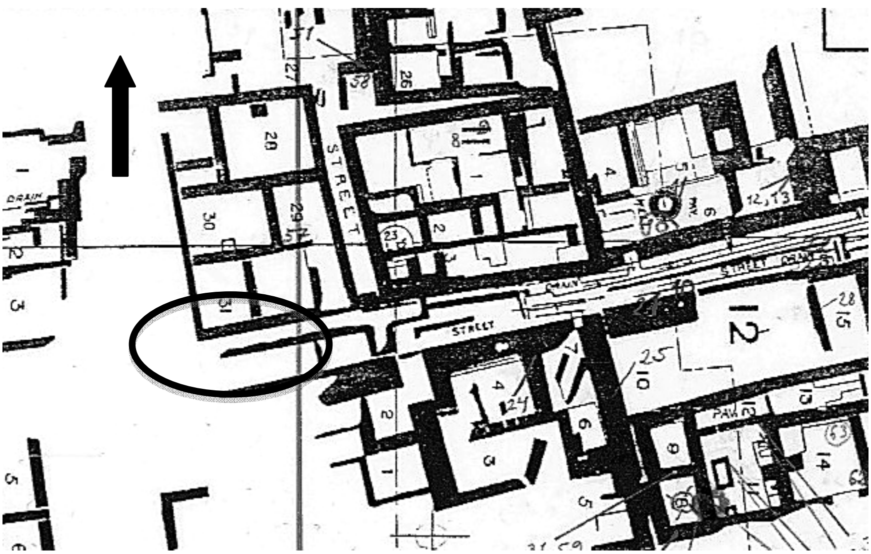


Fig. 5.42. A section of the plan of the DK-B and C areas, displaying the concentration 'bl 11-12str' (from Marshall 1931a:Plate LXII).

A summary of the concentrations according to the three criteria looks as follows:

1. *North 'bl 3-4'*
   Block borders and/or rooms: includes block border; includes a small street; has no well; concerns a large room, a medium-sized room and a large area. Among the objects found in the two rooms are some found within the rooms, some are found along the walls of the rooms. Density: spatially medium-sized, markedly dense appearance; large number of objects. Composition: medium-sized number of types; overwhelming majority of one type; certain spatial differentiation of types

2. *Middle A 'bl 5 north-west'*
   Block borders and/or rooms: within one block; borders a large street, includes a small street; has no well; concerns a large room and a few medium-sized rooms. Some objects are found within the rooms, some objects are found along the walls of the rooms. Density: spatially large-sized appearance; few objects. Composition: medium-sized number of types; a slight majority of one type; certain spatial differentiation of types

3. *Middle A 'bl 5-7-8'*
   Block borders and/or rooms: includes block borders; has no street; borders two wells; concerns a large room and a number of medium-sized and small rooms. Some objects are found within the rooms, some objects are found along the walls of the rooms (although sometimes the small sizes of the rooms makes this difficult to distinguish). Density: spatially large-sized, dense appearance; a large number of objects. Composition: a large number of types; overwhelming majority of one type; certain spatial differentiation of types

4. *Middle B 'bl 10 north-east'*
   Block borders and/or rooms: within one block; has no street; borders a well; concerns a number of small rooms. Objects are found along the walls of the rooms. Density: spatially medium-sized, dense appearance; few objects. Composition: few types; a slight majority of one type; no particular spatial differentiation of types

5. *South 'bl 12 r10'*
   Block borders and/or rooms: within one block; quite close to large street; has no well; concerns one large room. Objects are found in a corner but not along the walls of the room. Density: spatially small-sized, markedly dense appearance; few objects. Composition: few types; overwhelming majority of one type; no particular spatial differentiation of types

6. *South 'bl 12 south'*
   Block borders and/or rooms: within one block; has no street; has no well; concerns medium-sized and small rooms. Some objects are found within the rooms, some objects are found along the walls of the rooms. Density: spatially medium-sized, dense appearance; medium-sized number of objects. Composition: large number of types; a slight majority of one type; certain spatial differentiation of types

7. *South 'bl 12 south-east'*
   Block borders and/or rooms: within one block; has no street; borders a well; concerns a large room, a medium-sized room as well as small rooms. Objects are found along the walls of the rooms. Density: spatially large-sized, medium dense appearance; large number of objects. Composition: medium-sized number of types, majority of one type; no particular spatial differentiation of types

8. *South 'bl 11-12str'*
   Block borders and/or rooms: includes block border; located in street; has no well; concerns medium-sized rooms. Objects in rooms are found along the walls of the rooms. Density: spatially medium-sized, markedly dense appearance; large number of objects. Composition: few types, overwhelming majority of one type; certain spatial differentiation of types

The eight constellations have as seen different faces. They furthermore appear in different lights depending on criterion. 'Bl 5-7-8' encompasses different blocks and different rooms of varying sizes. At the other end, 'bl 12 r10' consists of one, single room. Some concentrations have connections to streets while others are adjacent to wells. 'bl 3-4', 'bl 12 r 10' and 'bl 11-12str' appear as markedly dense. 'Bl 5 north-west' and 'bl 12 south-east' are much less dense. 'Bl 5-7-8' and 'bl 12 south' display a large number of types. 'Bl 12 r 10' and 'bl

11-12str' contain few types. Five concentrations exhibit a majority or an overwhelming majority of a specific type of game-related object.

Correlation of concentrations of game-related types in relation to (a) block borders and/or rooms – (b) density – (c) composition of game-related types

When the three criteria are correlated, a number of repetitive features or links can be noted. As to *size*, 'Bl 5-7-8' in the area 'Middle A' stands forward as the largest concentration as concerns both number of objects, number of types and spatial size. 'Bl 10 north-east' in the area 'Middle B' appears as the smallest concentration in regard to number of objects and the second smallest as concerns number of types. As to *closeness to streets and wells*, a spatial difference can be noted in that none of the four concentrations displaying adjacency to streets are noted to be close to wells. Concerning *particularly large rooms*, three of four concentrations including such are among those showing closeness to streets. As to *density*, the character of density coincides in most cases with that definition of density that in the previous level was given to the specific game-related type of the locality in question. This shows us that the previously defined, different 'majorities', even when regarded together with other game-related types, still dominate the localities in question. Noteworthy exceptions are 'bl 10 north-east' in the area 'Middle B', as well as 'bl 12 south' in the area 'South'. The majority of dice that was found at the latter spot was not particularly large, and the cluster was hence defined as numerously small. However, considering all the game-related types of this location, the constellation is defined as medium-sized in number. The majority of dice is consequently not so marked here (it is not 'overwhelming'). As to the previously defined, *over-whelming majorities*, in three of four cases these can be seen to appear within locations defined as of markedly dense appearance. The exception is 'bl 5-7-8' in the area Middle A, which was noted to display an overwhelming majority of a particular type, but which is only of dense appearance. As to the *types making up these overwhelming majorities*, it is to be noted that they represent different types: casting sticks of group 2 in one case, casting sticks of group 1 in another, cones in a third, gamesmen in a fourth. As to the four localities that

show *connection to streets*, in two of these, 'bl 3-4' in the area 'North' and 'bl 5 north-west' in the area 'Middle A', this connection concerns a particular kind of game-related type, namely casting sticks of group 2. As to the definition *found within rooms*, distinctions become more blurred. This concerns most localities showing connection to streets, but it also applies to the concentration 'bl 12 south', which in this case show similarities with 'bl 12 r10'.

Coda

Based on three chosen criteria, distinct differences and similarities have emerged. The existing uncertainties prevent us from regarding the results as unquestionable, fixed definitions. Rather, our tripartite approach has lead us into a larger field of ***formal*** *patterns. Through the different focal points of these three points, the analysis has alternated between the study of details and the study of connected features. Following this, the results primarily appear in the form of* ***connections*** *or* ***relations****.*

5.4.2. Coding and Comparison (horizontal aspects) Starting from Material clusters →

In order to reach deeper into the nature and composition of the concentrations, aspects will be searched for that can provide further information about *connections*. The sorting and comparison of the materials will therefore be following in line with the principle of *putting together* versus *dividing* the materials under study. The sorting will consist of (a) a continued consideration of the structural features streets, wells, and large rooms:

- Can structural similarities and differences of a more deep-going, repetitive character be distinguished? Can streets and wells, respectively, point at different kinds of localities? Can large rooms be of particular significance here?

This (b) will turn a comparison with corresponding structural features in the published excavation reports of interest. Here, descriptions of

rooms situated at the outer side of houses, and presentations of unusual or unusually substantial buildings will be observed:

- Do we find game-related concentrations in specially equipped or particularly large/outstanding rooms?

A third undertaking (c) will consist of comparing the materials with other, non-game-related finds found at the same localities. This will be done through a study of the totality of registrations for certain places. The places will be chosen with a special concern for the types representing the different, overwhelming majorities:

- Do majorities of different, game-related types indicate more deep-going differences in find contexts on the whole?

This in turn (d) will lead to a consideration of the properties of the game-related types in order to define possible sub-groups:

- Can we define sub-groups among the game-related types?

The detailed analyses are undertaken for all concentrations. For best overview, however, only those concentrations that are most representative for each question will be presented here. Due to the detailed character of this level, the analyses will furthermore be guided by questions of more 'local' character.

a. Game-related concentrations in relation to selected structural features

Structural features consisting of streets, wells and large rooms and appearing within game-related concentrations are specifically focused upon (see figures 5.35. – 5.42.).

STREETS - WELLS

<u>Game-related concentrations with connection to streets:</u>

'Bl 3-4' in 'North'

'Bl 5 north-west' in 'Middle A'

'Bl 12 r10' in 'South'

'Bl 11-12str' in 'South'

<u>Game-related concentrations including wells:</u>
'Bl 5-7-8' in 'Middle A'
'Bl 10 north-east' in 'Middle B'
'Bl 12 south-east' in 'South'

LARGE ROOMS
<u>Game-related concentrations including large rooms:</u>
'Bl 3-4' in 'North'
'Bl 5 north-west' in 'Middle A'
'Bl 5-7-8' in 'Middle A'
'Bl 12 r10' in 'South'

'Bl 12 south' constitutes an exception as it neither shows any connection to streets, nor is seen to border a well. 'Bl 11-12str' can also be seen as an exception, as it is the only concentration found *in* a street. Considering the rest, we see a distinction between localities found in connection to streets and localities including wells. Here, we can go a step further and suggest the localities connected to streets as situated on the *outskirts* of blocks/houses. Turning to the localities including wells, we can see that the wells in all cases are situated northeast of the concentrations. These localities are all found a bit *away* from streets. As concerns localities found to include large rooms, these coincide with the localities with a connection to streets. 'Bl 5-7-8' in 'Middle A' constitutes an exception to this connection, as it consists of small rooms and a large room, at the same time as it is situated away from any streets. The features can be summarized as follows:

street – outskirt – large-sized room
or
well – away from street –small/medium-sized room

In view of these results, it became of interest to see what was written in the excavation reports concerning rooms lying on the outskirts of blocks/houses, and whether the large rooms of DK-C had been noted by the authors.

b. Game-related concentrations in relation to structural descriptions in the excavation reports

Structural descriptions concerning rooms lying on the outskirts of blocks/houses are searched for in the chapters on architectural features (Mackay 1931b, 1938h), as well as in the part of the chapter on the DK-area that concerns DK-C (Mackay 1931a:242-250). The latter is also studied for information concerning particularly large rooms in DK-C. As to rooms on the outskirts, besides entry rooms, the reports mention bathrooms. These lie along the outer wall of houses since they are in need of an outlet, which in a number of cases are connected to a drain in the street outside. Bathrooms have generally received this term while in addition showing traces of paved floors, sometimes called 'bathing platforms' (Mackay 1931b:273, 1938h:166f).[157] For the area of DK-C, room 1 in block 8 has been interpreted as a bathroom (Mackay 1931a:247). However, as none of the game-related concentrations seem to originate from any room with a paved floor, and since it is difficult to consider which rooms may have been entry rooms, this study is omitted from the presentation. Here, only information regarding particularly large/outstanding rooms in DK-C will be listed.

<u>Particularly large/outstanding rooms</u>

The information on structures of the area DK-C mentions a few houses of outstanding features such as unusually thick walls. Such are mentioned for a structure in the north of block 2. Block 3 is suggested by Mackay as possibly having been a temple due to its unusually large courtyard. The northern and western walls of block 5 are noted as "/…/too thick for those of an ordinary house", while room 6 in the southern part is described as "/…/too spacious for the usual dwelling house" (Mackay 1931a:242ff). In block 8, room 5 is suggested to have been of special importance since remains of two piers inside it are presumed to have supported a heavy roof. A further, outstanding building is the large house in the middle of block 11, bordering the large street in the south and a small street in the west. This has additions from a later time, which are mentioned to have been of the same, good quality as in the earlier (intermediate) time. No particular house is mentioned for block 12, but imposing walls are noted on both sides of the street between

[157] See Chapter 2.

the two blocks, while in block 12 the "/…/thickness of the walls is noteworthy" (Mackay 1931a:246ff).

We can so far conclude that all mentioned structures of large/outstanding constitution except for the building in block 2 contain game-related materials. However, the connection is not particularly pronounced. Block 5 for example contains only a few game-related objects and in block 8, room 5 does not contain more game-related finds than the rooms towards the north.

c. Game-related concentrations in relation to non-game-related finds

Non-game-related finds are selected by sorting the totality of registrations of the field register according to designations of point coordinates, and thereafter note every find designation for places of particular interest. In a next step, the selected registrations are sorted according to certain criteria in order to become more manageable. These criteria are mainly based on the kind of material the objects are made of. The reason for this choice is the limited degree of information obtainable from the column 'description' in the field register. As has been mentioned previously, a large number of descriptions in fact only refer to the material in question, such as 'stone'. The criteria that are used for sorting are 'pottery'; 'terracotta'; 'other material'. Every find registration that refers to a material different from pottery or terracotta is sorted as 'other material'.[158] The sorted materials (including game-related objects) are then counted as a percentage to gain relational numbers of materials. Particular types of objects that are repeatedly mentioned in the field register are noted as to presence and estimated degree of occurrence. These types are: beads and bangles; copper objects; seals; and weights. Particularities of the chosen places are also noted (the depth of the selected places is mentioned in brackets, using the established depth intervals). The places are concentrated to those localities from which the 'majorities' of game-related types have originated: 'bl 3-4' in the area 'North'; 'bl

[158] A certain number of find registrations will be excluded from the sorting as they lack description of material.

5-7-8' in the area 'Middle A' (this locality is divided between a northern and a southern part due to partly different appearances of these parts); 'bl 12 r10' in the area 'South'; 'bl 12 south-east' in the area 'South'; and 'bl 11-12str' in the area 'South'. Within these localities, point coordinates are selected that represent the densest occurrence of game-related objects.[159]

'bl 3-4' in 'North': overwhelming majority of casting sticks group 2

Point coordinate:	Total no. of reg.:	Pottery %:	TC %:	Other %:
1350 x 640	30	40	17	33
1350 x 630	52	23	12	58
1350 x 620	50	32	14	42

The selected places have a large share of pottery; a small share of terracotta; a large share of other materials

Particular objects: the find spots contain a small share of beads and bangles; a large share of copper objects; one seal; no weights

Particularities: the selected places display a number of copper objects, such as copper nails; there is a large number of registrations

(Most registrations belong to the depth intervals 0-1 metres and 1-2 metres)

'bl 5-7-8' in 'Middle A': overwhelming majority of casting sticks group 1

Northern part:

Point coordinate:	Total no. of reg.:	Pottery %:	TC %:	Other %:
1450 x 600	37	19	11	43
1450 x 610	79	25	9	47
1440 x 610	11	0	9	64
1430 x 600	7	0	14	57

Southern part:

Point coordinate:	Total no. of reg.:	Pottery %:	TC %:	Other %:
1480 x 600	26	4	50	35
1470 x 600	24	38	4	46
1470 x 610	11	27	0	64
1460 x 610	12	8	8	83
1460 x 620	25	24	16	56

The selected places have a small share of pottery; a small share of terracotta (with one exception); a large share of other materials

[159] Due to time- and space-related limits and the large number of finds, it was not possible to study finds of all point coordinates within particular localities.

Particular objects: the selected places contain a large share of beads and bangles; a share of copper objects (in the northern part); five seals; one weight
Particularities: the selected places display a number of seals; there are few registrations, in particular in the northern part (with two exceptions in the northern part)
(Most registrations belong to the depth intervals 0-1 metres and 1-2 metres)

'bl 12 r 10' in 'South': overwhelming majority of gamesmen

Point coordinate:	Total no. of reg.:	Pottery %:	TC %:	Other %:
1630 x 460	28	0	11	68
1630 x 470	15	13	7	47
1630 x 480	13	0	15	69

The selected places have a markedly small share of pottery (with one exception); a small share of terracotta; a large share of other materials
Particular objects: the selected places contain a large share of beads and bangles; one copper object; no seals; three weights
Particularities: the selected places display a number of weights; there are few registrations
(Most registrations belong to the depth interval 0-1 metres)

'bl 12 south-east' in 'South': majority of cones

Point coordinate:	Total no. of reg.:	Pottery %:	TC %:	Other %:
1650 x 430	35	0	34	29
1650 x 440	42	0	64	12
1640 x 440	76	24	47	16

The selected places have a markedly small share of pottery (with one exception); a large share of terracotta; a small share of other materials
Particular objects: the selected places contain a large share of beads and bangles; one copper object; no seals; one weight
Particularities: the selected places display a number of terracotta objects, particularly toys and figurines; there is a large number of registrations
(Most registrations belong to the depth intervals 1-2 metres and 2-3 metres)

'bl 11-12str' in 'South': overwhelming majority of cones

Point coordinate:	Total no. of reg.:	Pottery %:	TC %:	Other %:
1630 x 540	35	34	23	23
1630 x 550	19	27	26	11
1640 x 540	31	19	45	10
1640 x 550	74	16	39	15

The selected places have a large share of pottery; a large share of terracotta; a small share of other materials

Particular objects: the selected places contain a small share of beads and bangles; one copper object; no seals; no weights
Particularities: the selected places display a number of terracotta objects, particularly toys and figurines; there is a large number of registrations (with one exception)
(Most registrations belong to the depth interval 3- metres)

The different concentrations display find contexts that in various ways differ from each other. In 'bl 3-4' in the area 'North' we have large parts of pottery and other materials but not so much terracotta. The location displays more copper finds than the other localities. In 'bl 5-7-8' in the area 'Middle A', a large part of objects were made in other materials, while not so many were made of pottery or terracotta. Here, we have beads and bangles, and more seals than in the other localities. With two exceptions, the locality generally displays noticeably few finds. In 'bl 12 r10' in the area 'South' we likewise see a large part of objects made in other materials, while not so many were made of pottery or terracotta. The locality displays more weights than the other locations and on the whole has few registrations. In 'bl 12 south-east' in the area 'South' we find small numbers of pottery and other materials, while a large part of the objects were made of terracotta. Here, we have a great number of toys and figurines in terracotta. In 'bl 11-12str' in the area 'South', a large part of the objects were made of pottery and terracotta, while not so many were made of other materials. The location displays a noticeable number of toys and figurines in terracotta. As to *connections*, we can so far suggest that at the localities with majorities of casting sticks and gamesmen, re-spectively, the objects are mainly made of other materials. At localities with a large number of cones, the objects are to a large part made of terracotta. We can furthermore propose a link between casting sticks of group 2 and copper objects; between casting sticks of group 1 and seals; between gamesmen and weights; and between cones and toys and figurines in terracotta. We also have localities with very few registrations, in 'bl 5-7-8' in the area Middle A (in particular in the northern part), as well as in 'bl 12 r10' in the area 'South'.

In order to consider one of the proposed links between game-related objects and particular kinds of finds, namely the link between *gamesmen* and *weights*, we may look at the proposed border between

'bl 12 r 10' and 'bl 12 southeast' in the area 'South'. The point coordinate numbered 1640 x 440 forms a kind of northern border-point for the locality 'bl 12 south-east'. Here there are objects of both terracotta and pottery. This point, however, which is close to 'bl 12 r 10', also contains a weight. Moving westwards to the point coordinate 1640 x 450, we find no cones, but a lot of terracotta objects and one weight. If we move southwards to 'bl 12 south', where we find some gamesmen, we notice two weights in block 12 room 8 and 11, respectively. Proceeding to the area of 'Middle A', we can see that the point coordinate 1450 x 610 (in block 8, the intersection of the rooms 11-10-9) has one gamesman and one weight. Moving westwards to 1450 x 620, we find one gamesman and two weights. Moving a further step westwards, to 1460 x 630 (in block 5, room 3), we find one weight.

As to the connection between *casting sticks of group 1* and *seals*, we can note that block 8 contains more seals than the other blocks making up the concentration 'bl 5-7-8'. Thereafter, we find seals in a more limited number in those blocks of the area 'Middle A' that do not contain any game-related objects.

The presence of the distinctly different find contexts leads over to the question whether these can indicate a 'finer' division (sub-groups) of the game-related materials. At this point, we may recall the differences in material, pattern and so on that were mentioned in the presentation of the game-related types in the beginning of the study (in the Basement). Are these differences in some way possible to connect to the different find contexts, so that even more distinct localities may come forward?

d. Game-related concentrations in relation to properties of game-related objects

The meagre information provided by the field register concerning kind of material, appearance of pattern and so on is here again looked upon in order to see possible differences within the game-related types. The information is compared with the defined concentrations. This is done for all game-related types and all concentrations. However, here only selected parts of this study will be presented. The

study that concerns the concentration ‘bl 12 south’ in the area ‘South’ leads in turn to some further results of significance. Therefore, this concentration is here selected for presentation.

<u>Properties of the game-related finds in ’bl 12 south’ in South:</u>
‘Bl 12 south’ differs from the other concentrations in that it is not dominated by one, particular game-related type. It consists of a mixed variety of game-related types: 7 dice, 5 cones, 3 gamesmen, 2 balls, 1 casting stick of group 1 and 1 casting stick of group 2.
Studying these in detail reveals the following:
Dice: 4 dice are of ivory. 2 specimens are of conch shell and 1 of terracotta. The three last mentioned are found in room 11 and on the border to room 14
Cones: 3 cones are of terracotta. 1 cone is made of stone and 1 cone of ivory. The three cones of terracotta are found in the eastern fringe of the locality, which borders to the concentration ‘bl 12 southeast’. The other two cones are found in room 8.
Gamesmen: 1 gamesman is of terracotta. 2 gamesmen are of black stone.
Balls: both balls are made of stone.
Casting sticks group 1: the casting stick of group 1 constitutes a ‘rod’.
Casting sticks group 2: the casting stick of group 2 is made of copper.

The study of internal properties of ‘bl 12 south’ reveals that the concentration consists of a relatively large number of odd examples. The dice in terracotta indicates for example that we have to do with the rarer, cubical sort of dice. The cones in other materials than terracotta are found within the locality, while the terracotta cones are found bordering to the concentration ‘bl 12 south-east’, in which cones in terracotta are common. The gamesman in terracotta constitutes a further example of an odd specimen, as does the casting stick of copper. We may also observe that the two balls are made of stone. In this connection we can also notice that three tetrahedra are found in the outskirts of the concentration. We discern a rather odd composition that leads to further questions:

<u>Where do we find gamesmen in stone?</u>
Besides the above mentioned locality, gamesmen in stone are found in the concentration ‘bl 12 r 10’ in the area ‘South’, which is dominated by gamesmen. The gamesmen in ‘bl 5-7-8’ in the area ‘Middle A’, which were also found in connection with weights, are made of stone as well. Gamesmen in other parts of DK-C are made of other materials.

<u>Do we find other cones that are not made of terracotta?</u>
Except for the cones in 'bl 12 south', there is only one cone which is not made of terracotta. This specimen does not belong to any of the locations dominated by cones.

<u>Are balls in terracotta found at other locations than balls made of stone?</u>
In the area 'North', balls in terracotta constitute 38% of the totality of balls, while 23% are made up from balls in stone. In the area 'Middle A', balls in terracotta constitute 50% of the totality of balls, while 31% are made up of balls in stone. In the area 'South', balls in terracotta constitute 71% of the totality of balls, while 21 % constitute balls in stone. A larger number of balls in terracotta can accordingly be found in the area 'South'. Within the area 'South', it can be noted that all balls in block 11 are of terracotta; two of three balls in the locality 'bl 12 south-east' are of terracotta; all balls with one exception in the locality 'bl 11-12str' are of terracotta.

<u>Do the exceptions mentioned for the casting sticks of both groups differ in some way from the rest?</u>
Most of the exceptions are made of copper.

<u>What about the spatial distribution of the sub-types of the casting sticks of group 1?</u>
Those examples that are mentioned as 'section' are all found in the southern part of 'bl 5-7-8' in the area 'Middle A' as well as in 'bl 10 north-east' in the area 'Middle B'. Those mentioned as 'rods' are found in the central and northern parts of 'bl 5-7-8' in the area 'Middle A'. Some of the more outspread examples are also mentioned as rods.

<u>What kind of dice do we find in 'bl 5-7-8' in 'Middle A'?</u>
Of the 5 examples of dice found in this locality, 3 constitute those dice that have been mentioned to have incisions, which indicate that we have to do with the long type of dice.

These local studies can be suggested to strengthen the characters of the different localities and point to further divisions and connections. Small concentrations of gamesmen contain specimens in stone, while gamesmen of a more outspread appearance are of other materials. In localities dominated by cones there are cones in terracotta, while cones in other materials appear as more outspread. Casting sticks of group 1 are spatially divided between specimens described as

'section' and specimens noted as 'rods'. Dice in 'bl 5-7-8' in the area 'Middle A' appear to be long dice, while the only example of a probable cubical dice is found among the odd specimens making up the concentration of 'bl 12 south'. Balls become partly spatially divided as well; on the one hand we have terracotta balls, and on the other hand balls in stone. Since terracotta balls dominate in the area 'South', as well as are found in concentrations containing quantities of cones, a closeness can be suggested between these objects and cones. Due to the appearance of gamesmen in stone, a connection can be suggested between the localities 'bl 12 r10' and 'bl 12 south' in the area 'South'. This would re-form these localities into one, single locality, at the same time as the border towards the locality 'bl 12 south-east' would become more pronounced. On the basis of the spatial difference seen between the sub-types of the casting sticks of group 1, a division can be suggested between the northern and southern part of 'bl 5-7-8' in the area 'Middle A'. The southern part would become more closely related to 'bl 10 north-east' in the area 'Middle B', while the northern, more mixed part, would possibly become more closely connected to 'bl 3-4' in the area 'North'.

Correlation of (a) selected structural features – (b) structural descriptions in the excavation reports – (c) non-game-related finds – (d) properties of game-related objects

The different, comparative studies give different pictures at hand. They do not come up with a synchronized view, but can be said to complement each other. The comparison with structural features show that almost all the concentrations are *either* located close to streets, that is, on the outskirts of blocks/houses, *or* located in a way so that they include a well in the north-east while being situated away from streets. The former concentrations are in addition situated in large rooms. The comparison with the excavation reports show a different pattern, as a number of game-related concentrations, whether they are connected to streets or not, are to be found in '*outstanding*' structures (although the connection is not all that pronounced). The comparison with non-game-related finds can be said to contextualize the differences, as the game-related concentrations come to signal *deeper, find-contextual differences*. The differences between the

various game-related concentrations become thereby strengthened. The comparison with internal properties of the game-related objects shows at *more homogenous* game-related concentrations, as odd specimens appear to be found at odd localities. On the basis of the two last comparisons, some of the established concentrations can be *divided* and/or *built together* into new concentrations: 'Bl 5-7-8' in the area 'Middle A' can be divided into a northern and a southern part. As mentioned, the northern part can be suggested to become connected to 'bl 3-4' in the area 'North'. With this new concentration, we can in addition see that the northern part of 'bl 5-7-8' comes to display a street-connection. The southern part of 'bl 5-7-8' may become linked to 'bl 10 north-east' in the area 'Middle B', not only due to the presence of the sub-type mentioned as 'section' among the casting sticks, but also because of the fact that both localities are situated away from streets while having a well in their north-east corner. In the area 'South', 'bl 12 r10' and 'bl 12 south' could possibly also be connected on grounds of the gamesmen in stone. 'Bl 12 south-east' distinguishes itself from the former two concentrations, at the same time as it points to similarities with 'bl 11-12str' in both game-related as well as non-game related content.

To summarize, we can conclude that game-related localities in general can be found:

- In connection to streets, that is, on the outskirts of blocks/houses *or* south-west of wells, that is, away from streets
- In large rooms *or* in small and medium-sized rooms
- In contexts with 'other' material than terracotta *or* in contexts with terracotta material
- In contexts with particular kinds of non-game related objects
- In contexts with few find registrations *or* in contexts with many find registrations
- In contexts with largely homogenous game-related objects

As has been shown, exceptions occur in all points, and the different comparisons partly overlap each other. In general, however, the game-related concentrations show some clearly distinguishable connections, which could be best illustrated by looking at what they are *not*. They are generally *not* found in streets or bordering to wells. They are generally *not* found in a way where they have both a connection to a street and are extending 'inwards'. They are generally *not* found in find contexts that are mixed with quantities of both terracotta- and other sorts of materials. Their content of game-related finds do *not* in general appear as mixed.

Coda

*The alternation between the study of details and the study of connected features has here developed into a strategy that could be termed **bringing together/dividing up**. This may resemble the concept of firm/loose in the former level in that it can be seen as a tool, again in order to avoid a problematic search for fixed definitions. Through this concept, we have been able to concentrate on connections, which at the same time need not quite agree. We have gained insight into spatial, composite concentrations, which we have been able to distinguish as well as relate in ways that could be named **connected** or **separated**. These can in turn be described as tools, flexible and type-adjustable in shape.*

What about the defined connections when we consider them in relation to the depth intervals?

5.4.3. Comparison (vertical aspects)
Starting from Temporal clusters →

Despite the problems inherent in a vertical, spatial consideration, this will nevertheless be undertaken due to the vertical tendencies that emerged in the previous level. The aim is to gain an orientation in a vertical direction as well concerning possible, repetitive tendencies. Therefore, the question 'when' the game-related places are has been formulated out of depth-*lengths*, that is, number of depth intervals:

- When are the game-related places considering depth-*lenghts*? Are they game-related places for short/long vertical lengths?

The study starts with an overview of the depth intervals of the different game-related concentrations. Thereafter, depth intervals will be considered in relation to the structural features discussed above. Lastly, depth intervals will be studied in relation to non-game-related find contexts, number of find registrations and composition of game-related types.

a. Depth intervals of game-related concentrations

Depth intervals of the game-related concentrations are listed in order of frequency.

1. <u>North 'bl 3-4':</u> the interval 0-1 metres; the interval 1-2 metres
2. <u>Middle A 'bl 5 north-west'</u>: the interval 0-1 metres; the interval 1-2 metres
3. <u>Middle A 'bl 5-7-8': northern part</u>: the interval 0-1 metres; the interval 1-2 metres <u>southern part</u>: the interval 2-3 metres; the interval 1-2 metres; the interval 0-1 metres
4. <u>Middle B 'bl 10 north-east':</u> the interval 0-1 metres
5. <u>South 'bl 12 r10':</u> the interval 0-1 metres; the interval 1-2 metres
6. <u>South 'bl 12 south':</u> the interval 0-1 metres; the interval 1-2 metres; the interval 2-3 metres
7. <u>South 'bl 12 south-east':</u> the interval 2-3 metres; the interval 1-2 metres
8. <u>South 'bl 11-12str':</u> the interval 3- metres; the interval 0-1 metres

We see that none of the concentrations have examples from all four depth intervals. A closer look at 'bl 12 south' in the area 'South' reveals that only one, single find originates from the depth interval 2-3 metres. Accordingly, the southern part of 'bl 5-7-8' in the area 'Middle A' appears as the only concentration with objects in three depth intervals. 'Bl 11-12str' in the area 'South' is the only concentration displaying finds of the depth interval 3- metres. The depth interval 0-1 metres is here only represented by two items.

b. Depth intervals of game-related concentrations in relation to structural features

This study is undertaken for all game-related concentrations. Here, only a few aspects of the study will be presented, aspects that most clearly show general patterns.

- Game-related localities defined as connected to streets or as situated on the outskirts of blocks/houses consist of game-related finds belonging mostly to the interval 0-1 metres and thereafter the interval 1-2 metres ('bl 3-4' in 'North'; 'bl 5 north-west' in 'Middle A'; the northern part of 'bl 5-7-8' in 'Middle A'; 'bl 12 r 10' in 'South')
- Game-related localities defined as including a well in the north-east or as situated away from streets consists of game-related finds belonging mostly to the interval 2-3 metres and thereafter the interval 1-2 metres (the southern part of 'bl 5-7-8' in 'Middle A'; 'bl 12 south-east' in 'South') (an exception is 'bl 10 north-east' in 'Middle B')
- When considering finds of the interval 0-1 metres and 1-2 metres, 'new' localities turn up adjacent to wells (the southern part of block 5 in 'Middle A'; the north-eastern part of block 5-7-8 in 'Middle A'; 'bl 10 north-east' in 'Middle B')

c. Depth intervals of game-related concentrations in relation to non-game-related find contexts, number of find registrations and composition of game-related types

These studies are undertaken for all game-related concentrations. Here, three, general aspects will be presented.

- The find contexts noted to be composed of 'other' materials than terracotta all appear in connection with game-related concentrations of the intervals 0-1 metres and 1-2 metres
- Noticeably few find registrations were noted for two concentrations that belong to the intervals 0-1 metres and 1-2 metres ('bl 5-7-8' in 'Middle A', in particular in the northern part; 'bl 12 r 10' in 'South').
- The game-related concentrations belonging to the intervals 1-2 metres and 2-3 metres are composed of a few game-related types. The game-related concentrations belonging to the intervals 0-1 metres and 1-2 metres consist of a larger number of game-related types.

Correlation of (a) depth intervals of game-related concentrations – (b) depth intervals of game-related concentrations in relation to structural features (c) depth intervals of game-related concentrations in relation to non-game-related find contexts, number of find registrations and composition of game-related types

With the adding of vertical aspects, the repetitive differences noted for the concentrations can be suggested to become strengthened. We can see not only that the concentrations connected to streets, or the concentrations defined as located on the outskirts of blocks/houses, are dominated by less deep depth intervals than the ones found away from streets. When studying the finds of the intervals 0-1 metres and 1-2 metres, we also see 'new' concentrations that appear close to wells. Considering all the concentrations dominated by the intervals 0-1 metres and 1-2 metres, we can note that these consist of large numbers of materials other than terracotta. They are also made up of more mixed game-related types. Two of these concentrations in addition have very few find registrations. Here, we can furthermore note that they are found to be smaller in size than the concentrations of deeper depth intervals. Moving from the intervals 1-2 metres and 2-3 metres to the intervals 1-2 metres and 0-1 metres, we thus reach a more outspread picture consisting of a greater number of concentrations that at the same time are smaller in size, more mixed, and located on the outskirts.

Coda

Through the study of vertical aspects, it has become possible to consider the game-related concentrations more thoroughly. What we in this way have reached can be termed as ***contextual concentrations*** *and* ***connected contexts****, which are not only dependent on game-related objects, and which can be studied both horizontally and vertically. We can thus define* ***repetitive tendencies****,* ***formal variations*** *and* ***exceptions*** *in the following way:*

Repetitive tendencies *– can be concluded for the following two, contextual concentrations:*

1. *Away from streets – terracotta – homogenous collection of game-related types – many find registrations – large area – small/medium-sized rooms – depth intervals 1-2 metres and 2-3 metres*

2. *Connected to streets/adjacent to wells – 'other' materials – mixed collection of game-related types – few find registrations – small area – large-sized room – depth intervals 0-1 metres and 1-2 metres*

Formal variations *– appear when we compare the various, comparative studies of game-related concentrations with the above, rather schematized repetitive tendencies.*

Exceptions *– are the features that to varied degrees can be suggested to differ from the above, repetitive tendencies:*

- *The concentration 'bl 11-12str' in the area 'South' since it is the only concentration found in the deepest depth interval (3- metres), and since it is found in a street*

- *The concentration 'bl 12 south' in the area 'South' since it consists of what seems rather odd game-related finds*

As is to be seen, the exceptions concern features that cannot be connected in any way but stand alone in an otherwise noticeably connected context. We thus arrive at a very limited number of finds that appear as 'un-connected'.

Have we so far reached at satisfactory answers as to where and when game-related places are situated?

5.4.4. Conceptualisation
Starting from Temporal clusters →

We have tried to illuminate game-related places through the questions as to where and when game-related concentrations could possibly be found. The focus has demanded studies of a more detailed character, at the same time as we are aware of the impossibility of getting at detailed facts due to the uncertainties inherent in the materials. Through the concept *bringing together/dividing up*, we have however avoided a search for fixed definitions. Instead, we have tried to

identify details of a formal character, or, said differently, details that concern *connections*. In this way, we have attained some main points concerning where and when game-related places can be found. Searching for repetitive, relational patterns, it has become possible to let different aspects such as 'non-game-related finds' or 'depth intervals' support each other: not only have game-related materials been used to indicate particular concentrations, but different kinds of concentrations have been helpful in pointing out what can now be termed game-related places.

Summary of some results:

- The concentrations defined as game-related places are mostly seen to be *dominated* by a particular type of find, mainly Casting sticks, Cones or Gamesmen
- Three localities, either connected to a street or without a connection to streets, include *block borders*: 'bl 3-4' in 'North'; 'bl 5-7-8' in 'Middle A'; 'bl 11-12str' in 'South'
- *Spatial features can be connected* in either one of the following ways for most localities: street – outskirts – large-sized room, or well – away from street– small/medium-sized room
- A possible, yet not particularly marked link can be noted between *large/outstanding structures* and game-related finds
- The game-related concentrations represent *deeper, find-contextual differences*: Casting sticks and Gamesmen can be connected to other materials than terracotta; Cones can be connected to terracotta
- Connections to *particular kinds of finds* can be seen: Casting sticks of group 2 can be connected to copper objects; Casting sticks of group 1 can be connected to seals; Gamesmen can be connected to weights; Cones can be connected to terracotta figurines and toys

Summary of some results (continued):

- *Sub-groups* can be seen among the game-related materials that point to more homogenous game-related concentrations: concentrations of Gamesmen consist of gamesmen in stone; concentrations of Cones contain cones in terracotta; Casting sticks of the type mentioned as 'section' are found in the southern part of 'bl 5-7-8' in 'Middle A' and in 'bl 10 north-east' in Middle B. Dice that appear in 'bl 5-7-8' in 'Middle A' are of the long type; Balls in 'South' are mostly of terracotta
- A *closeness between Balls and Cones* can be seen, in particular for one of the concentrations ('bl 11-12str' in 'South')
- Some of the established localities can on the basis of the above features be parted and/or built together into *new concentrations*: 'bl 12 r10' in 'South' and 'bl 12 south' in 'South' can be connected because of the Gamesmen in stone. This in turn strengthens the border towards 'bl 12 south-east' in 'South'. 'Bl 12 south-east' and 'bl 11-12str' in 'South' show similarities in both the game-related and in the non-game-related content. 'Bl 5-7-8' in 'Middle A' can be divided in one southern and one northern part. The southern part becomes more related to 'bl 10 northeast'in 'Middle B' due to the more homogenous game-related content and because both localities appear south-west of a well. The northern part becomes more related to 'bl 3-4' in 'North' due to the more mixed game-related materials and since both localities display a connection to streets
- Somewhat schematized, the *intervals 2-3 metres and 1-2 metres* can be connected to the key words away from streets – terracotta – homogenous collection of game-related types – many find registrations – large area – small/medium-sized rooms. The *intervals 1-2 metres and 0-1 metres* can be connected to the key words streets/adjacent to wells – 'other' materials – mixed collection of game-related types – few find registrations – small area – large-sized room.

Summary of method:

Collection: Composite concentrations of game-related finds have been searched for on the basis of the tendencies of 'firmnesses' and 'intertwined features' of the previous level. An elbowroom has again been possible to obtain through a tripartite approach. This has lead us into a larger field of formal patterns. Based on the elbowroom, we have been able to alternate between a study of details and a study of connected features. The emphasis has come to be laid on connections.

Coding and comparison (horizontal aspects): The alternating between a study of details and a study of connected features can be suggested to follow a sorting according to the principle of *bringing together/dividing up*. This more abstract concept has come to act as a tool, with which we have once again been able to avoid a search for fixed definitions. Instead, focus has been laid on repetitive, abstract patterns, through which we have gained insight into spatial, composite concentrations. We have been able to distinguish these as well as relate them to each other by using concepts like *connected* as well as *separated*, which again can be seen as tools.

Comparison (vertical aspects): From the point of view of the previously mentioned concepts *connected* as well as *separated* we have proceeded to consider the concentrations from a vertical perspective as well. By this investigation, the repetitive, abstract patterns, as well as the concentrations that these have been able to point out, have become deepened. The concentrations have become possible to distinguish as well as to relate as *contextual concentrations* and *connected contexts*; concepts which have become new kinds of tools. Based on this, we have again made a distinction of the materials into *repetitive tendencies*, *formal variations* and *exceptions*. In the end we have a significantly small number of finds (labelled as exceptions) that can be designated as 'without any connections'.

Coming this far, what we have reached are first and foremost a number of variations or *forms* of game-related places. Do they signal spatial and temporal differences in the use of the places? Or, rather, if we concentrate on the particular, momentary character of play and gaming, do they show differences in which games were played in them? If so, we could change the question as to where and when game-related places can be found into how they are expressed. How have they been handled with, while being game-related places?

5.5. Grounding 'gaming' by comparative searches in the HR and the DK-G areas: generating theory (Level 3)

In the previous level, we managed to delineate a number of forms of game-related places. This ended up with a focus on the gaming part of the places. The questions as to where and when these places could be found were changed into *how* they were expressed. That is to say, the question now concerns the gaming in itself. More concretely, this can be formulated as *how* the where and when of the former level are expressed, by which the interrogatives become bound together into a where-when-how:

- How is the gaming/the where and when of the game-related places expressed?

By asking *how* the where and when of the former level is expressed, this level will not proceed with further levels of abstraction. Instead, it tests the tenability of the former results, both descriptive and conceptual in character, by a widened, comparative perspective. The study will step out of the area of DK-C in order to take game-related materials from other areas in Mohenjo-daro in consideration. The aim is not to leave DK-C, but to ground the hitherto emerged results in a larger context. The methodological character will accordingly take on a somewhat different and simpler character, in which the Data collection, the Coding and the Comparison will not be guided by specific questions and will not end with specific 'correlations' and 'coda'. The coding and comparison will be formed out of selected results of the former levels. Lastly, a separate 'correlation' and 'coda' will appear under Conceptualisation. Here, the study returns to DK-C with the results of the other areas in its luggage. The following questions will be of main concern:

- How representative are the game-related places?
- Can the repetitive tendencies be deepened?
- Can variations of significance be seen?

- Do the developed, main concepts appear as useful?

The goal of the study is hence to tie the former results and methodological steps together and present the core of the analysis, directed by the interrogative 'how'.

5.5.1. Collection of data
Starting from Spatial clusters →

In order to reach the question of how the gaming at the game-related places is expressed, it will become necessary to collect data very selectively. This is the case since answers will now be searched for that are based on the descriptive and conceptual results of the former levels. Game-related materials will therefore be collected from two different areas of Mohenjo-daro that on the one hand can contribute with useful information, on the other hand partly can complement each other concerning the kind of information. The selected areas are the HR and the DK-G areas, both much larger than the DK-C area.[160] As concerns the HR area, the published field register (Jansen & Urban 1985a) provides relatively easy reading since the material has already been organized. It also provides the opportunity of gaining 'complete' information concerning spatial distribution of game-related finds (in total, the register consists of 6332 entries). The information is however not particularly detailed. The collecting of game-related materials from the DK-G area is based on the published excavation report (Mackay 1938a). Since this only includes selected parts of the excavated finds, it is not possible to get at 'complete' spatial distributions. However, as was shown in the Basement of the analysis, it provides detailed information including illustrations on the finds. It also contributes with depth-related information. As was mentioned in the beginning of this chapter, due to time- and space-related limits, this is not considered for HR. Somewhat simplified, in this way we are provided with one quantitative and one qualitative kind of source to compare with. Despite their shortcomings, they are considered useful for the comparative aim of this level. This is the case since the study is

[160] See Chapter 2 for information concerning these areas.

not directed on finding fixed definitions, but rather on identifying formal features of a larger, inter-connected kind. The collection of game-related types of finds from the HR and the DK-G areas will be based on and classified according to the game-related types from the DK-C area.

a. Game-related types from HR

Game-related finds from HR are searched for by going through the published version of the field register of the area (Jansen & Urban 1985a). In total, 552 game-related designations are found. Of these, 529 registrations are suggested to be of a certain character and 23 of an uncertain character.[161]

Using the previously established definitions, six types can be established:

1. <u>Gamesmen</u>
   Includes the designations 'chess'; 'chessman'; 'chessman-like'; 'chess-men'
2. <u>Cones</u>
   Includes the designations 'cone'; 'cone P-type'; 'cones'; 'conical'
3. <u>Tetrahedra</u>
   Includes the designation 'triangular'
4. <u>Balls</u>
   Includes the designations 'ball'; 'balls'; 'rattle'; 'spherical'; sphere'
5. <u>Dice</u>
   Includes the designation 'dice'
6. <u>Casting sticks</u>
   Includes the designations 'bar'; 'bars'; 'rod'; 'stick'; 'sticks'; 'casting stick'[162]; 'hair-pin'

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[161] Certain versus uncertain character refers primarily to degree of understanding as to what kind of object the term is meant to signify.
[162] The 'casting stick'-type presented the greatest variety of designations, such as the following examples show: "1 frag: of carved ivory"; "1 black colour rect: carved obj: ht: 1 6/8″"; "frag: of a three-sided ivory obj: L: 1 2/8″" (Jansen & Urban 1985a). Examples such as these were invariably tabled as 'casting stick'.

A spatial distribution was made of a selection of types.

b. Game-related types from DK-G

Game-related finds from DK-G are found by going through various chapters in the published excavation report (Mackay 1938c, 1938d, 1938e, 1938f, 1938g, 1938i, 1938j, 1938k, 1938l). In total, 331 game-related designations are found (only those specimens that are provided with spatial specifications are considered). By using the previously established definitions, the designations can be grouped into six types. A seventh type is added consisting of a game-related type not mentioned for DK-C. Other new, game-related sub-types, which are not mentioned for DK-C, can be seen under 'gamesmen' and 'tetrahedra'.

1. <u>Gamesmen</u>
   Includes the designations 'Gamesmen Straight-sided cones with definite head'; 'Gamesmen Cones with incurved sides'; 'Gamesmen Flat triangular gamesmen'; 'Gamesmen Bobbin-shaped gamesmen'; 'Gamesmen Cylindrical with flat top and base'; 'Gamesmen Cubical gamesmen'; 'Gamesmen Human form'; 'Pendants'
2. <u>Cones</u>
   Includes the designations 'Gamesmen Round topped cones'; 'Gamesmen Pointed cones'; 'Small cones'
3. <u>Tetrahedra</u>
   Includes the designations 'Gamesmen Regular tetrahedra'; 'Gamesmen Four-sided pyramidal gamesmen'
4. <u>Balls</u>
   Includes the designations 'Balls'; 'Marbles'; 'Rattles'
5. <u>Dice</u>
   Includes the designations 'Cubical dice'; 'Tabular dice Square in section; four sides all different'; Tabular dice Square in section; three sides different'; 'Tabular dice Square in section; two sides similarly marked'; 'Tabular dice Triangular in section; three sides all different; 'Tabular dice Triangular in section; two sides alike; the third different'
6. <u>Casting sticks</u>
   Includes the designations 'Casting sticks Square in section; all four sides alike'; 'Casting sticks Rectangular in section; wider faces alike or different, the narrow faces alike or blank'; 'Casting sticks

Triangular in section; all three sides alike'; 'Casting sticks Half round in section'; 'Round rods'; 'Ivory fish'; 'Miscellaneous ivory objects'; 'Awls (ivory/bone)'; 'Awls (copper/bronze)'; 'Kohl-sticks'; 'Ivory batons'; 'Hair-pins'

7. Game boards
   Includes the designation 'Gameboards'

A spatial distribution of the listed finds was undertaken.

5.5.2. Coding and Comparison (horizontal aspects) Starting from Material clusters →

Selected results of the previous levels will be tested here as to their validity while being compared with features of the HR area or both the HR and the DK-G areas. The spatial distribution of HR is as stated above the most trustworthy since the source in question can provide 'complete' information concerning spatial distribution. The spatial distribution of the 'un-complete' collection of finds from DK-G will be used as an addition in some cases. The results of this however are only to be regarded as hinting at trends. The selection of results is based on the summarized points of results at the end of each level (points concerning non-game-related finds as well as vertical aspects are excluded). They are listed according to the level they belong to in the square below. Thereafter follows the outcome of the successive comparisons with HR or both HR and DK-G (the brackets before each answer denotes the area in question). After the comparative section, some new features that were detected while studying the HR and the DK-G areas will be listed as well.

a. Comparisons with previous results

Comparisons will be made by listing the selected results from the previous levels and thereafter examine the same points for the HR area or both the HR and the DK-G areas.

In DK-C:

Basement – Relational proportions of game-related types and general patterns of spatial distribution:

1. The different game-related types display the following relations: Casting sticks of both group 1 and 2 28%; Balls 24%; Cones 21%; Dice 12%; Gamesmen 12%; Tetrahedra 3%
2. Marked differences can be seen in the spatial distribution of the number of game-related finds, with some locations (such as 'Middle B') lacking these finds more or less completely
3. Spatial distribution of the majority of Casting sticks differs markedly from those of the majorities of the other game-related types
4. Cones constitute the most centred type of object, being more or less confined to one, single area (the area 'South')
5. Game-related registrations constitute 8% of the totality of registrations

Level 1 – Characteristic marks of game-related types in the spatial distribution

6. Spatial locations that harbour different game-related types have different *characters*: 'North' has a markedly dense cluster; 'Middle A' has a limited space of particular concentration; 'South' has an even appearance (within which small clusters can be distinguished)
7. Two of the game-related types under study (Casting sticks of group 1 and Gamesmen) do not in general appear in large numbers in connection to *streets*. Cones are significantly more connected to streets
8. The game-related types under study (Casting sticks of group 1, Cones and Gamesmen) have different, *spatial characters*: Casting sticks of group 1 have a markedly clustered and separated character; Cones have a partly single-, partly clustered-, while at the same time spatially confined character; Gamesmen have a largely single, spatially 'forming part of'-like character

Level 2 – Characteristic marks of game-related places in composition and spatial distribution:

9. The concentrations defined as game-related places are mostly seen to be *dominated* by a particular type of find, mainly Casting sticks, Cones or Gamesmen
10. Three localities, either connected to a street or without a connection to streets, include *block borders*: 'bl 3-4' in 'North'; 'bl 5-7-8' in 'Middle A'; 'bl 11-12str' in 'South'
11. A possible, yet not particularly marked link can be noted between *large/outstanding structures* and game-related finds
12. A *closeness between Balls and Cones* can be seen, in particular for one of the concentrations ('bl 11-12str' in 'South')

<u>Basement – Relational proportions of game-related types and general patterns of spatial distribution:</u>

1. (HR) Calculating the game-related types as percentages, the following relations emerge: cones 37%; casting sticks 26%; balls 24%; gamesmen 7%; dice 4%; tetrahedra 2% (the proportions of find types of the two areas display both similarities and differences).
2. (HR, DK-G) In HR, the spatial distribution of game-related finds displays on the one hand a fairly dispersed picture, with at least a few finds to be found in most parts of the area. On the other hand, different degrees of concentrations can be seen as well. On the whole, more finds appear in section A, as well as in the eastern and central parts of section B. Parts with relatively few finds can be seen in the northern north-western and southern south-western parts of section B. In DK-G, differences can be seen with relatively few finds in the south-western and central western parts. Larger concentrations can be seen in the eastern part, such as in blocks 3, 7-8 and 8A (similarities can be seen as to an uneven distribution of game-related finds).
3. (HR, DK-G) In HR, section A, casting sticks mainly appear in the central and southern parts. In section B, casting sticks mainly appear in the central parts. These parts display at the same time relatively few finds of other game-related types. In DK-G, casting sticks mostly appear within a limited area in the south-east as well as in an equally limited part in the north-east. Most finds of the other game-related types are distributed over a larger area, extending from the north-west to the south-east as well as from the north-east to the south-east. The location of finds of other game-related types thus partly overlaps, partly differ from the locations of the casting sticks (similarities as well as a few differences for the part of DK-G can be seen as to different spatial locations of casting sticks).
4. (HR, DK-G) In HR, cones can be found over more or less the whole area. A particularly large share can however be found in the eastern, middle part of section B, as well as in the street towards the east. In contrast, a majority of gamesmen can be found more or less confined to the south-western corner of the area. In DK-G, ’small cones’ are found in the northern part of the area, while the other sub-types of cones appear in the east and south-east (similarities can possibly be seen with the DK-G area. Although a majority of cones can be seen in particular parts of the HR area, a difference can be noted in that gamesmen appear more spatially confined in this area).
5. (HR) The field register for the HR area shows 6332 registrations in total. Game-related registrations with a certain definition count 529,

that is, 8% of the totality of registrations (a similarity is seen in the share of game-related finds)

Level 1 – Characteristic marks of game-related types in the spatial distribution:

6. (HR) At first glance, the outspread appearance makes it difficult to distinguish different characters of game-related locations. This applies for example to block 7 in section B, and block 3 in section A. At the same time however, different characters can be noted as well. Large and numerous clusters, as well as much smaller clusters as well as more outspread features are found in for instance blocks 8 and 5 in section B and block 4 in section A. Particularly dense areas of concentrations appear as well, such as in blocks 2 of both sections (similarities can be seen as to different characters of game-related, spatial locations).
7. (HR, DK-G) In HR, the casting sticks and the gamesmen appear in very limited numbers in or by streets. The cones point in contrast to a significant connection to streets. In DK-G, the types in question are rarely found in or by streets (similarities can be seen as to connection to streets. A difference can be seen in the noticeable connection to streets displayed by the cones in HR).
8. (HR) The following spatial characters can be seen for the game-related types casting sticks, cones and gamesmen: markedly clustered and separated; partly single, partly clustered; largely single. The clustered cones mostly appear in numerically small-sized clusters. The gamesmen are seen to form a few, numerically small-sized clusters as well (similarities can be seen in the different, spatial characters. Differences can be noted in that both cones and gamesmen appear in small-sized clusters).

Level 2 – Characteristic marks of game-related places in composition and spatial distribution[163]:

9. (HR) In HR, some of the game-related concentrations are clearly dominated by casting sticks, others by cones. As for the latter, however, these are frequently accompanied by balls as well. Instances with gamesmen dominating particular locations are more

[163] For the part of HR, we may suggest the numerically and spatially larger concentrations to be seen as places. As for DK-G, it is too far-fetched to suggest any places to be distinguished among the already selected materials. Here, we may solely speak about the appearance of possible trends.

difficult to distinguish (similarities and differences can be seen as to the domination of particular, game-related types).

10. (HR) The concentrations that can be distinguished are sometimes seen to include parts of more than one block. The concentration seen in the eastern part of block 2 in section B can furthermore be suggested to be linked with the number of finds found in the street towards the east (similarities can be seen as to concentrations not always following the borders of blocks).
11. (HR, DK-G) In HR, no link between particularly large/outstanding structures and game-related finds can be seen.[164] In DK-G, no link between particularly large/outstanding structures and game-related finds can be seen. Particularly in DK-G, but to some degree in HR as well, structures mentioned as large/outstanding contain significantly few game-related finds (differences can be seen, although the large/outstanding structures in DK-C do not have particularly large shares of game-related finds).
12. (HR, DK-G) In HR, closeness between balls and cones can be noted not only for one, but for several localities. In DK-G, no such closeness appears (similarities can be seen between HR and DK-C, although the closeness is much more clearly seen in HR. Differences can be seen with DK-G).

b. New features

While studying the HR and the DK-G areas, some new, repetitive features appear. Here, two such features will be presented.

13. (HR) While spatial closeness is above pointed out for cones and balls, a spatial difference can be noted as well; slightly more balls than cones can be seen in section A, while slightly more cones than balls can be noted for the western part of section B.
14. (DK-G) The two game boards are found at locations were no other game-related finds have appeared. One of them derives from block 21, close to block 18, which is one of the large/outstanding structures. The other game board belongs to block 1, which constitutes another of the large/outstanding structures.

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[164] For information concerning large/outstanding structures in the HR and the DK-G areas, see Chapter 2.

5.5.3. Comparison (vertical aspects) Starting from Temporal clusters →

Due to the inherent, vertical differences in the materials at hand, no true comparisons will be made with previous, vertically related results from the DK-C area. The vertical dimension of the DK-G area will instead be studied as a separate phenomenon. It will be recalled that the division by Mackay into three periods has been much criticized.[165] Still, it will be used here for a brief, vertical consideration. Since Mackay used absolute depth measurements, it is nevertheless more tenable than the relative depth measurements used in DK-C.[166] Here, a few, chosen aspects will be presented, which similarly to the above mentioned features can be taken as new phenomena.

a. New features of vertical character

Features of vertical character for the DK-G area can be distinguished by studying the vertical depth measurements of individual finds and their belonging to the corresponding period, using the three periods and sub-periods established by Mackay (the Late Period consisting of strata 1-3, the Intermediate Period consisting of strata 4-6, and the Early Period consisting of stratum 7).[167] Here, a selection of such features will be presented.

1. Spatial transfers: balls, cones (of the round topped and pointed sub-types) and gamesmen (of the sub-type with incurved sides) up to and including Intermediate I are found at localities extending from north-west to south-east. From Late III, the direction changes and the localities are now situated in an area extending from north-east and southwards. Before Intermediate I, casting sticks are mainly found in the south-east. From Intermediate I, they are mainly found in the northeast.

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[165] See Chapter 2.

[166] For information on the vertical orientation systems used during the large-scale excavations, see the beginning of this chapter.

[167] See Chapter 2.

2. Continuity: in course of the subsequent periods, there does not seem to be any type that either disappears or turns up.
3. Quantitative difference: markedly few game-related finds are to be found in the Intermediate II.
4. Quantitative difference for the types cones (of the sub-type ‘small cone’) and gamesmen (of the sub-type with incurved sides): more cones appear in the earlier than in the later strata, while more gamesmen are found in the later than in the earlier strata.
5. Qualitative difference for casting sticks, cones (of the sub-type ‘small cone’) and gamesmen (of the sub-type with incurved sides): casting sticks are more varied in appearance in the earlier than in the later strata; cones display a more classical appearance in the earlier than in the later strata; gamesmen exhibit a more varied appearance in the later than in the earlier strata.
6. Vertical localities of game boards: one of the two mentioned game boards originates from the uppermost layer. The other one belongs to the Intermediate II. When compared with the other game-related finds mentioned for DK-G, it turns out that both game boards originate from levels within which few of the other game-related items have been found.

5.5.4 Conceptualisation
Starting from Temporal clusters →

Back to DK-C: a correlation

Mostly similarities, but also some noteworthy differences can be seen when comparing the DK-C area with the HR and the DK-G areas. The similar, relative number of game-related finds in the HR area can be suggested to strengthen the existence generally of this category of finds. It is at the same time worth noting the relatively greater number of cones in HR than in DK-C, and the relatively greater number of casting sticks, dice and gamesmen in DK-C than in HR. Noteworthy is also the fact that while cones are found to be largely confined to one, single area in DK-C, a similar spatial confinement can be seen with the gamesmen in HR. Apart from this, we see a range of more or less similar features as to the spatial distribution and character of game-related finds. There is an uneven distribution of game-related finds to be seen in both HR and DK-G, with more or less empty localities as

well as more dense ones. In HR, *cones*, although more dispersed, appear in a dense concentration in one, particular area. They are largely found in connection with streets. They moreover appear as partly single, partly clustered, and show a noticeable closeness to balls. In HR, *casting sticks* appear distinctly clustered and in both HR and DK-G they appear in localities where other game-related types are generally not found. In HR, *gamesmen* largely appear as single finds although some of them emerge in small clusters. They do not stand out in the same way as cones and casting sticks do. Both in HR and in DK-G, a connection to streets is in general not particularly pronounced. In HR, however, cones point to a significant connection to streets. No connections can be seen between large/outstanding structures and game-related finds. In light of these results, the exception noted in level one and level two concerning the cluster of cones found in the street between blocks 11 and 12 in the area 'South' does not appear as particularly odd anymore. In contrast, the spatial confinement of the cones to the area 'South' now stands out as somewhat exceptional. With the new features at hand, we can in addition note yet another particularity for DK-C. A similar division between the distribution of balls and cones noted for HR can now be seen in DK-C as well. Studying the area 'South' more closely, a few more balls can be seen to appear in the northern and north-western parts, while slightly more cones are found in the southern and south-eastern parts. Lastly, in light of the scarcity of finds of game boards, the spatially odd localities of the two game boards from DK-G may be noted. Partly contrasting features appear with the vertical consideration. Although the information from DK-G cannot be compared with any vertical considerations from DK-C, it nevertheless offers indications concerning spatial transfers and quantitative and qualitative differences, as well as constancy over time.

Coda

By following the successive way of working in the previous levels in a both compressed and widened form, we have at the same time tested the particular method of working. We have illuminated ***formal features of a larger, inter-connected kind****, by which we have once again avoided any search for*

fixed definitions. By now, the analysis can be said to have reached a ***theoretical saturation****, to use the concept used in grounded theory. Having tested the results of the previous levels, we can now sketch the different stages of the particular way of working in level one and level two in a repetitive, pattern-like way:*

<u>Level 1</u>: The concept **firm/loose** is seen as a tool (by which fixed definitions are avoided). We thereby illuminate repetitive, abstract patterns, which gives us insight into characters of types. We distinguish and relate the characters with **forming part of** and **separated**, which, again, are seen as tools (by which fixed definitions are avoided). They help us to highlight vertical aspects and accentuate a deepening of repetitive, abstract patterns. Characters of types are thereby distinguished and related as secluded tendencies (**firmnesses**) and forming part of-tendencies (**intertwined features**). By this, we distinguish **repetitive tendencies**, **formal variations** and **exceptions**, whereby we arrive at a small number of finds designated as 'deprived of context'.

<u>Level 2:</u> The concept secluded tendencies (**firmnesses**)/forming part of-tendencies (**intertwined features**) is seen as a tool (by which fixed definitions are avoided), which accentuates the concept **bringing together/dividing up**. This is in turn seen as a tool (by which fixed definitions are avoided). We thereby illuminate repetitive, abstract patterns, which gives us insight into spatial, composite concentrations. We distinguish and relate the concentrations with **connected** and **separated**, which, again, are seen as tools (by which fixed definitions are avoided). They help us to highlight vertical aspects and accentuate a deepening of repetitive, abstract patterns. Composite concentrations are thereby distinguished and related as **contextual concentrations** and **connected contexts**. By this, we distinguish **repetitive tendencies**, **formal variations** and **exceptions**, whereby we arrive at a small number of finds designated as 'without any connections'.

So far, we can say that we have gained information concerning how the where and when of the game-related places are expressed. These answers can be said to form both the repetitive tendencies, as well as the formal variations of this level:

Repetitive tendencies *– how is the where and when of the game-related places expressed when seen from a general perspective:*

- *of noticeable presence*
- *of similar kind (referring to game-related types as well as structural patterns) in different neighbourhoods*
- *of constant appearance*

Formal variations *– how is the where and when of the game-related places expressed when seen from a detailed perspective:*

- *of differences as to number and dispersal of different game-related types*
- *of changeableness when seen from a vertical perspective*

Exceptions *– are those features that do not answer to the above 'answers':*

- *large/outstanding structures containing large numbers of game-related finds (applies to block 3 in DK-C)*
- *the confinement of most of the cones in DK-C to one, single area (the area 'South')*
- *game boards of non-perishable materials (only two examples found in DK-G)*
- *game-related finds that do not 'fit' into the characters of their types (such as the few, dispersed examples of casting sticks)*

We can thus present different kinds of answers to the question 'how is the gaming expressed' in DK-C/Mohenjo-daro:

- it is expressed as frequent (from the point of view of the relative share of game-related finds in DK-C and HR)

- it is expressed as rather evenly spread out when seen from an inter-point of view, considering different neighbourhoods together (based on DK-C, HR and DK-G)

- it is expressed as markedly unevenly spread out when seen from an intra-point of view, considering individual neighbourhoods (based on DK-C, HR and DK-G)

- it is expressed as consisting of kinds of games that mainly have left behind casting sticks, cones and balls (based on DK-C and HR)

- it is expressed as generally not consisting of kinds of games that have left behind game boards of non-perishable materials (based on DK-C, HR and DK-G)

- it is expressed as of a border-crossing character, which is to say, it is in several cases not keeping within the borders of blocks/houses (based on DK-C and HR)

6
Play Matters
– thoughts on the terms of play –

Everything has shape, if you look for it. There is no escape from form.
-Rushdie, *Midnight's Children* (1981:226)

The number of /…/gamesmen, marbles and dice, is one of the most interesting features of Mohenjo-daro.
-Mackay, *Further Excavations at Mohenjo-daro* (1938d:557)

The task of re-contextualizing game-related finds into past play-contexts, and attempting this from an archaeological point of view, forms the theme of this chapter. The aim is in this connection seen as a challenge; for an archaeological research approach in particular, but also for scientific thinking in general, since the latter forms something of an opposite of play. The chapter holds therefore a markedly theoretical character. As discussed in Chapter three, archaeological approaches on ancient game-related materials constitute a relatively small field of research. Generally and somewhat simply speaking, we may suggest two main reasons for this. The first one may be seen in the traditional viewpoint that game-related materials, together with all sorts of materials belonging to the larger field of amusement and playfulness, are not to be regarded as important objects. A second reason can be found in the doubts recurrently raised as to how to distinguish within a time- and space-setting different from one's own which artefacts may actually have been intended for playing games with. Among those approaches that do exist, we moreover find that the more traditional ones recurrently tend to be rather object-centred, discussing matters of morphology, questions of origin, or kind of game to which the particular artefact may once have belonged (the latter commonly following established ways of classifying games, like 'games of skill/chance', 'dice games', 'race games', and others).[168] That is, the focal points rest in different ways upon a quest for *what* the

[168] For more on this, see Chapter 3.

object *is,* or what it once *was*, by which the object is at the same time taken out of its immediate context. This perspective is rather tempting to see as an effect of the mentioned difficulty whether we can really be sure that this or that object was indeed intended for a game-related purpose. With such an obstacle at hand, this seems in turn to make an object-centred approach appear of prime essentiality. The perspective could also be seen reflecting the idea that the object as play object is less important from an informational point of view. With an object-centred perspective, the find in question can instead be studied as one of several culture-bearing artefacts.

The question, however, is what happens with the playful, 'fun' dimension of a possibly game-related object when such a perspective is set up. If we, so to speak, turn the object serious, we are at the same time actually de-contextualizing the object by taking it out of its play-related context. Perhaps we do not find it necessary to trouble ourselves with this, since the significance of such a context is so seemingly trifling for archaeological inquiries. It may also be that this particular context, in its elusiveness, cannot really be said to exist for us archaeologists. If so, however, we could suggest that the scarcity of approaches into this field does *not* primarily depend on the unimportance attributed to these finds, and *not* on the difficulties pointed out when attempting to distinguish them. No, rather, this scarcity would depend on a lack in the archaeological school itself of *means* of continuing along this particular path of research. If we indeed manage to identify possible, play- and game-related material, what then are we supposed to do with it? How can we conceptualize our findings along ideas of 'playfulness'? From this point of view, the idea of the artefacts as meaningless in their role as play-utensils, or the outspoken difficulties of distinguishing them as game-related finds, rather appear as something which one could 'lay the blame on' in order to avoid the field.

In the previous chapter, game-related materials from the area of DK-C were in focus for a comprehensive analysis by which the artefacts in question were approached from different angles. Successively, a number of specific features could be observed in the spatial distribution. The objects turned up hinting at specific distinguishable repetitive patterns in the area, for instance in relation to structural remains. This we could bring further if we consider the

finds from the aspect of them as related to the phenomenon of play. When handling these finds, we should logically speaking be stepping on traces of once prevailing play- and game-related behaviours, the material outcome of particular play moods. The question, however, is how we as archaeologists could illuminate such behaviours and moods. How can we grasp this something called 'play'? And what would be the point of such venture? Could we at all expect some kind of visible, social or societal impacts to be revealed when aiming at tracing play? More or less impossible or even fuzzy, questions such as these seem to point at a muddle of ignorance and confusion alike. In order to narrow down the subject, we could put two fundamental issues to the fore: (1) supposing that we would indeed reach at some sort of play-point, then what could be expected to happen? Or, expressed somewhat differently, what would be the archaeological reward of our venturing into this field? This in turn brings forward the next fundamental point, a point that at the same time can be said to precede the first: (2) what does play actually imply? What is it, and in which ways may game-related remains lead us towards it? With these two points as guides, we may embark on the task of re-contextualizing game-related finds into past play-contexts.

6.1. Methodological and theoretical starting points

The working grid that was formed for this study and previously described in detail[169], will in this chapter take on a more theoretical direction (fig. 6.1.). It will be utilized in order to reach the aims of this chapter. That is, it will provide different ways of testing our challenging aim of getting a hold on the phenomenon of play from an archaeological standpoint. The grid is to be read in the same way as previously, that is, from left to right beginning in the lowest row. The rows, each consisting of four compartments, follow as before in accordance with the levels and stages of work of grounded theory, such as has been outlined by Guvå and Hylander (2003).[170] Only, this

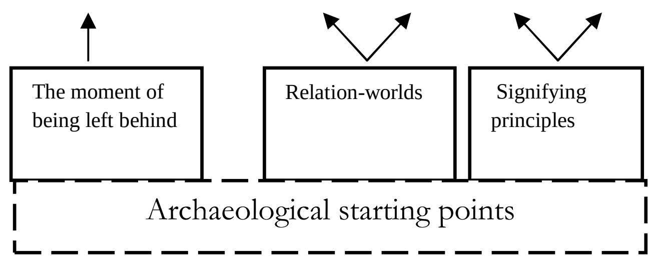
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[169] See Chapter 4.
[170] See Chapter 4.

time the four levels have been reduced to three. The first, rather openly held orientating level, and the second, more strategically focused level have here been united into one (a purely orientating, basically held step is not considered necessary since this chapter rests on already obtained results through the comprehensive analysis of the previous chapter).

Fig. 6.1. The working grid, specifically developed for Chapter 6.

Play spectra → Stages of work → Levels of work ↓	Starting unities Collection of data	Construction of play Coding	Frame of play Comparison	Mood of play Conceptuali-sation
Level 3 – Generating theory				
Level 2 – Searching for pattern				
Level 1 – Formulating concepts				



Play spectra

In order to be able to grasp the elusive phenomenon of play, extra headings are added at the upper part of the grid, called *Play Spectra* and placed on top of each of the four columns (*Starting unities*; *Construction of play*; *Frame of play*; *Mood of play*). The idea of the play spectra, as well as the individual headings (except for the first one), are borrowed from Fritz (2004).[171] Rather than striving for one, firm definition of play, which Fritz points at as both difficult and problematic due to the elusive character of play, he suggests an alternative approach through three separate dimensions or spectra of play (Fritz 2004:16f). As this makes our task more manageable, these will be used here. The spectra can be described in the following, shortened way: The dimension termed *construction* denotes according to Fritz the necessary ground for the other two dimensions without being a part itself of the playing process. That is, it stands for the structure of mind which the partakers create for themselves with the help of chosen materials, rules and agreements. By this spectrum, the space that is indispensable for a play process to come true can be built up and demarcated as to possibilities and goals. According to Fritz, the spectrum may be exemplified with some people gathering for playing cards. Before the playing starts, the partakers build up the necessary space by agreeing upon the rules. During the playing, they may perhaps discover that something is wrong about the rules, whereby they can 'step out' of the playing process to adjust the rules before continuing to play. The point is hence not the play process in itself, but the behaviour possibilities which are latent, those which thanks to the construction dimension can be given the possibility to arise (Fritz 2004:32ff). The dimension named *frame* concerns the framing of a 'world of play', a world differing from the real world. This means that actions, although of a tangible nature, receive other kinds of statuses and significances that cannot be estimated along established standpoints. In contrast to the character of logic reasoning and the firmly built constructions of the real world, the world of play

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[171] The headings are here somewhat modified as well as translated from their original, German terms *Konstrukt-*, *Rahmungs-*, and *Verhaltensdimension*, respectively (Fritz 2004:16f).

is denoted by occasional and fleeting constructions. These work as thin membranes, which leave out the things that are of importance in the real world. Characteristic for this world is the 'as if'-perspective. It can be exemplified with a group of people in a swimming-pool who in a seemingly violent or quarrelsome manner noisily splash each other with water. When someone from outside tries to calm them down, he or she gets the answer that 'we are just playing!'. The framing is accordingly dependent on the patterns of interpretation of the partakers. Since the meaning of things is not inherent in the latter, every individual element has to be framed, or worked upon by us through perception, in order to become sorted in for us meaningful manners. This competence of framing can according to Fritz be further practiced and developed in play. Through framing signals, it becomes apparent whether a specific event is 'serious' or 'for fun'.[172] However, what is of importance in this connection is that frames can never be fixed, but that they can be redefined in an instant, such as with a meaning wink. In that way, the framing can be said to constitute a constant process of transformation (Fritz 2004:27ff). The world of play is compared with a world arising, within which the playing human "/…/with 'building stones of the real world' develops new worlds – that partly /…/travesties the real world/…/" (Fritz 2004:28, *my translation*). The world of play with this becomes a connection between imagination and the real world (Fritz 2004:260). The dimension called *mood* refers to the specific mood or behaviour of play, which differs from other forms of moods. Rather than being result- or goal-oriented, a playful mood is centred on and finds emotional value in the activity itself. It is distinguished by four distinctive features: (1) *self determination*: one is in a mood of personal freedom, enjoys the possibilities of expressing one's own, inner, usually dormant capabilities, follows one's own impulses, as well as decides oneself upon the 'how' and 'what' of one's actions; (2) *contrast*: one is freed from and experiences a contrast to formalized habits and routines and holds the potential of perceiving one's own self differently; (3) *venture* and *experiment* (as well as *uncertainty* and

[172] In this connection, Fritz builds upon lines of thought borrowed from among others Goffman. We also distinguish ideas developed by Bateson concerning play's specific structure of framing (Fritz 2004:28f footnotes 14 and 15).

excitement): one is unaware of the outcome of, and whether one will manage or not, the undertaking one has given oneself; (4) *imagination*, *creativity*, and *richness in ideas*: one connects with particular kinds of qualities that, represented by the above terms, stand in close association with the human being's capabilities to adapt to changeable and various surroundings. Situations where playful moods may appear can following Fritz be exemplified with the hobby gardener who plans and tends his garden with great pleasure. Another example refers to the teacher who, when preparing the next day's lesson, follows a sudden impulse of planning the lesson in a rather unconventional way. The examples show us in particular that playful moods may appear practically everywhere, applying both to the real world as well as the world of the mind. They may range from feelings of inspiration to total merging with the undertaking in question.[173] Plunging now and then into a playful mood provides an interchangeable quality of one's life and habits; the chance is offered to recover from formalized routines. From an anthropological perspective, it can be said to relate to the awakening and furnishing of one's cognitive capabilities and adaptive potentials (Fritz 2004:17-26). The three play spectra can according to Fritz be differently emphasized depending on the specific composition of the particular play process under study (Fritz 2004:36f). Above all through their *independent character*, they appear as operational concepts by which to search for play. With this, it should become possible to evade the problematic, elusive character of play, at the same time as there will be no need for diminishing this elusiveness. Borrowing the idea of the three play spectra for archaeological use has however at the same time involved modifications. In the outline of Fritz, the dimension termed Mood (*Verhalten*) is presented first, and the one called Construction (*Konstrukt*) is considered last. Here a different order is chosen that may suit an archaeological angle of approach better (see below). A fourth kind of spectrum is moreover added for the first column. The three play spectra can be suggested to agree with the explicitly separated stages of work of the grid that follow the methodological outline of grounded theory. By placing the play spectra on top of each

[173] The latter, rather indefinable emotional state is perhaps best described in the world of fiction, such as with the term *Orm* by Moers (2008).

of the four columns in the grid, each play spectra in turn conforms to one of the four stages of work. The attachment of the different spectra is accordingly aimed at the following:

Starting unities (corresponds to *Collection of data*): this term does not constitute an actual play spectrum but works as a kind of starting point for the level in question. In line with previous reasoning[174], it concerns a collection of data that is based on a few chosen aspects and a few theoretical ideas that suit the aspects in question, as well as on selected features of the empiric materials that was examined in the previous chapter. The aim is to attain a form of unities from which interpretations can start. The aspects and theories are chosen out of different ideas of how to approach the phenomenon of play.

Construction of play (corresponds to *Coding*): this term is here used for denoting types of play and gaming. It concerns a sorting and coding of the collected data according to the particular aspects and theoretical points selected for the level in question. I have chosen to put this play spectrum first, as it appears as the most easily distinguishable one for an archaeological approach, being dependent on material remains. With this spectrum, 'spaces of possibility' can be demarcated for different types of play to be seen in the data.

Frame of play (corresponds to *Comparison*): this term refers to the distinguishing of worlds of play. Here, comparisons of the coded data are undertaken that follow in concordance with the particular aspects and theoretical ideas chosen for the level in question. Resting on suggested types of play, the aim is to distinguish larger (social) contexts or frameworks that could be suggested as functioning as worlds of play.

Mood of play (corresponds to *Conceptualisation*): this term concerns the discerning of what can be suggested as traces of playful moods. A conceptualisation of the previous stages of work is done that is, again, directed by the particular aspects and theoretical points of view selected for the level in question. This spectrum of play has been placed at the end as it seems the most difficult spectrum to illuminate from an archaeological point of view. However, it is also placed lastly since it appears as the very 'crest' of the play spectra.

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[174] See Chapter 4.

Without the attainment of playful moods, both frames of play and constructions of play would lose their meaning and die out. This spectrum can therefore be seen as the ultimate step of our aim. Reaching the presence of playful moods, we would gain the chance of searching for possible, social and societal significances and impacts of play.

Horizontal and vertical testing

As previously described, the separate rows or levels of the working grid pinpoint the aim of trying out different ways. At the same time as they can be said to build upon each other in the way advocated by grounded theory, they are to be taken as freestanding.[175] In this chapter, this standpoint has in addition other sorts of bearings as well. A number of fields of tensions in connection with the subject of play can be accentuated and given specific attention, which is in accordance with the choice of letting the working process be guided by different play spectra. By using this model, it is possible to study the subject of play simultaneously from horizontal and vertical angles: from the perspective of the particular level, as well as from the viewpoint of the particular spectrum. Attempting to bring the former angle into and through the latter one, it is with this firstly possible to prove the content and viability of the different perspectives of the levels (for instance: may it from this or that approach become possible to distinguish a ‘frame of play’?). Secondly, the opportunity arises to analyze the spectra in light of the different levels. With such a horizontal-vertical approach, degrees of concordance and/or clashes between the spectra and the chosen perspectives can be continually observed.

The placing of the play spectra straightly opposite the archaeological starting points[176] at the bottom of the grid, may at the same time be taken to mark the endeavour of the chapter to illuminate play from an *archaeological* point of view. From this perspective, the play spectra and the archaeological starting points could be conceived

[175] See Chapter 4 and Chapter 5.

[176] For recalling these, see Chapter 4.

of as two poles, between which our general outlines must necessarily be laid down, but which at the same time challenge each other. However, incorporating the idea of the three play spectra into the grid has at the same time the consequence that the working process develops in close accordance with the theoretical thinking underlying the idea of the spectra, in which play among others is characterized by brief duration and continual transformation.[177] Rather than searching for static definitions, play is approached as flexible and adjustable form. In this way, we attain a close relationship between our methodological way of working and the particular, changeable and momentary nature of play that the materials in question are suggested to hint at.[178] This has the consequence that the mode of work, aimed at illuminating the phenomenon of play, will touch upon and intertwine with the theoretical thinking underlying the development of the three archaeological starting points. This can also be formulated in the way that the undertaking will not start from the archaeological starting points but rather land in them.

Disposition and beginning

The first level of the grid will describe two opposing ways of interpretation. In the second level, different directions will be seen to amalgamate. The third level will return to the outline of two parallel ways, which partly appear as freestanding, partly complement each

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[177] For more on characteristics of play, see Chapter 1.

[178] The relationship can be more clearly illustrated with the idea of Bakhtin (1984/1968) of the general reversal of things of the 'laughing culture'. In his work on Rabelais and the history of the 'popular culture of laughter', Bakhtin investigates the dialectics and the power struggle between what is official, restricted and oppressive, and what is perceived of as the (laughing) culture of the people (or, in other words, what is 'closed' versus what is 'open'). Here, we find the idea that the consequence of the so-called downward direction of the laughing culture, the movement towards the inverted and wrong-sided, is that things, put upside down, become in need of reconsideration. The things thus manifest themselves in new ways for us, through which we once more become capable of distinguishing them (Bakhtin 1984/1968:370ff). This can be said to illuminate the (playful) ways of testing of the process of work suggested here, within which the materials become continuously reconsidered.

other. Each level ends with a reconsideration of the process of work that has been undertaken. From which angle, then, may our search possibly start? Two common, yet different standpoints recurrently found within research on ancient games and game utensils constitute on the one hand what could be termed as the pastime approach, on the other hand what we may call the status approach. The first viewpoint sees the remains in question as traces of more or less idle pastime activities. The second viewpoint tends to accentuate game-related objects as markers of social status (such as when they are manufactured in spectacular ways, and/or when found in, say, richly equipped graves).[179] It may thus seem close at hand to start the inquiry from these two angles.

6.2. Ordering game-related objects as traces of idle pastime/ as status possessions: formulating concepts (Level 1)

In the previous chapter, the game-related finds under study displayed a number of repetitive features. These were expressed both in distinctly different appearances as well as recognizable uniformity. By this, the game-related types came to show up individual *characters*. How, then, are we to understand that such can be seen when it comes to game-related materials? Is it reasonable to think that play and game-activities, which we think of as untroubled and light-hearted in content and undertaken to make time pass pleasantly, should leave traces of markedly repetitive nature? Or may the repetitiveness actually imply that the objects in question have a different connotation, far from what perhaps is a too naive idea of innocent pastime? Inquiries such as these may be summarized in the following way:

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[179] More on archaeological approaches on game-related artefacts can be read in Chapter 3. In that chapter, the reader will find examples of archaeological considerations on ritual aspects of ancient game-related utensils as well. This will however not be considered in this chapter, among other reasons since I consider this to bring us too far away from the aim of illuminating the phenomenon of play.

- What do the individual characters displayed by the game-related objects signal?

6.2.1. Collection of data
Starting from The moment of being left behind→

In the first level of analysis of the previous chapter, called Basement, it became clear that the repetitive features of the game-related finds were not only the result of excavational circumstances. In the following level of analysis, 'Level one', it was suggested on the basis of the repetitive features that the different game-related types had different characters. In the next level of analysis, these characters could be further strengthened and differentiated. It is however important to be aware of which signification we put into the term character. As we know, the sorting of the materials into types is based on the (mostly) game-related definitions mainly presented by Mackay (1931c, 1938d). Since these in their turn can be said to signal different kinds of games, we would with the term character imply that what we see are the traces of different kinds of game activities (in other words, the character of a specific type is formed through the particular way of playing with that type). However, when thinking in this way, we would leave out an essential dimension concerning these objects, namely the way or ways they were once left behind. In the first and second levels of analysis, it was shown that markedly few finds were turning up as scattered in the sense of being 'deprived of context' or 'un-connected'. It is easy to think about these few items as possibly lost or thrown away. Yet, the great numbers of finds contributing to the different characters have all in one or the other way been left behind as well. If we ignore this circumstance, we would ignore the essential part played by 'formation processes'. We would also pass over important information as to the repetitive features and different characters displayed by the game-related types. How, then, can we understand these features in terms of being left behind? One way to do this may be through the distinguishing of refuse groups following Seymour and Schiffer (1987).

a. Primary-, secondary-, and de facto refuse: the moment of being left behind

Admitting the complexity in distinguishing which parts result from formation processes and which from behaviour patterns within a specific assemblage, Seymour and Schiffer (1987) nevertheless stress the essentiality of including considerations on the former. According to them, one way of doing this is to try to distinguish the material remains according to what kind of refuse it may represent. As was briefly mentioned in Chapter four, they distinguish three main refuse groups: *primary-*, *secondary-*, and *de facto* refuse. *Primary* refuse constitutes that sort of refuse that accumulates through oversight, accordingly consisting of very small bits of materials. *Secondary* refuse is made up of materials brought together consciously as waste, while *de facto* refuse relates to what we may call truly abandoned objects. Searching to define this last category, Seymour and Schiffer suggest looking for the presence of restorable pots, found on floors, which constitute likely indications for having been abandoned rather than discarded. Still usable artefacts may also be searched for that, if they are found on floors as well as in close association with such pots, may represent *de facto* refuse. With reference to this kind of sorting of artefacts and exemplifying their own work, Seymour and Schiffer demonstrate how this may contribute to a more thorough and viable analysis of activity areas (Seymour and Schiffer 1987:552ff, 560, 594ff).

As to the game-related materials of our study, and as was clearly shown in the analysis, there is considering the sources at hand a number of shortages.[180] What we can see from the field register is however that there is not much mention of fragmented examples of the game-related types in question. One suggestion is that the entries cannot represent all too tiny bits of objects, since in that case they would probably not have received their respective classifications. On these grounds, we may rule out the possibility that a significant number of the game-related finds would represent primary refuse. Concerning the two other groups, secondary- and *de facto* refuse, we may for example consider the proposed correspondences seen between game-related types and non-game-related finds. As was

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[180] For more on this, see Chapter 5.

shown in the previous chapter, concentrations of cones were found in connection with terracotta objects while concentrations of casting sticks and gamesmen were found with objects in other materials than terracotta and, to some extent, pottery.[181] This indicates that the materials do not appear mixed higgledy-piggledy, which seems to speak against the idea that it would constitute secondary refuse of the kind outlined by Seymour and Schiffer. The regular impression indicates that we are dealing with some kind of *de facto* refuse. We cannot however tell whether the great majority of the finds have been left in exactly that position in which they have been found. What we tentatively could suggest may be a *de facto-resembling pattern* to be seen. We cannot go further than that as we lack information concerning for example layers of floors, as well as entries that provide the exact horizontal location of the objects. The suggested pattern can moreover only apply to the majority of the different type groups, while more oddly located finds cannot be considered in this context. As to such single finds, Seymour and Schiffer use the term 'orphan' (Seymour and Schiffer 1987:567). In any case, it seems as if we are mainly dealing with finds that rather than being accidentally dropped, or consciously disposed of as waste, in some way or the other have been left behind in the sense of being *abandoned*. Returning to the characters of the game-related types, one way of following this view may be that it must not primarily be the ways in which the objects may once have been used in play activities that are mirrored in these. This becomes especially clear when we consider the various, extended processes by which humans may abandon things as referred to by Seymour and Schiffer (1987:551ff).[182] What comes in focus may as a suggestion rather be the *phase of abandonment* of the finds in question.

Out of this view, it is close at hand to think of whether such things as differences in preferences can lie behind the leaving behind of the game-related types. The question is however what kind of preferences we are talking about in that case. Can preferences really be touched upon when it comes to idle pastime activities? One way of

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[181] For more on this, see Chapter 5.
[182] See Chapter 4.

answering with a yes could perhaps be with the idea of central interests as formulated by Caillois (2001/1958).

b. Central interests: theoretical starting point no. 1

Play and gaming is according to Caillois (2001/1958) conditioned by four basic inclinations or interests that direct the player into a particular category of play. Mentioned in Chapter one as one of the classical play theorists, Caillois aimed with his alternative division of play and gaming to criticize the, to his mind, all too superficial and inconsequent ways of defining play: at one time based on the game-related material; at another on number of partakers; at a third on skills required and so on.[183] One and the same game may often, as he points out, be played by different numbers of partakers, or require different kinds of skills. One and the same item can on the other hand be used for the playing of different kinds of games. Playing with marbles, which is mostly seen as a game of skill, turns for example into a game of chance if one of the partakers is to guess how many marbles the other partaker holds in his closed hands. As Caillois maintains, the traditional, superficial division between games of chance and games of skill is in reality signalling a difference in area of interest. This forms the starting point for an alternative way of definition, centred on the particular power of attraction that draws a player to a specific category of games. In this way, Caillois distinguishes four main categories of games: (1) *Agôn*, which stands for the significance of competition; (2) *Alea*, which represents the importance of luck; (3) *Mimicry*, which implies the significance of simulation; (4) *Ilinx*, which stands for the importance of vertigo. As maintained by Caillois, every category is guided by a main principle and, so, consists of games of similar character (Caillois 2001/1958:11ff).[184] The point is "/…/that the divisions [accordingly] set up correspond to *essential and irreducible*

[183] Among play researchers, one recurrently finds a critical stand towards attempts of defining play. This is often seen as both problematic and meaningless (cf. Fritz 2004:42; Hübner 1992:5f and footnote 14).

[184] Each category is in turn sub-divided in that each of its games is ranked (Caillois 2001/1958:13).

impulses" (Caillois 2001/1958:14, *my italics*). To emphasize the meaning of this, Caillois explicitly exemplifies with a mixture of games, which would commonly be perceived of as belonging to different categories. On the basis of the kind of game-related materials at hand in our context, the first two categories, *agôn* and *alea*, appear as the most relevant to have a closer look at. Following Caillois, within *agôn* we find games as widely apart as chess and football. *Alea* refers to games such as roulette and games of dice. Within this last category, the player is according to Caillois passively awaiting the outcome: "/…/he does not deploy his resources, skill, muscles, or intelligence. All he need do is await, in hope and trembling, the cast of the die" (Caillois 2001/1958:17). Within the first category, on the other hand, qualities such as patience, qualifications and experience are demanded. Here, the players "/…/work as hard as they can to win/…/" (Caillois 2001/1958:12, 17). With this outline, we see that we reach a deeper significance of the terms chance and skill that goes beyond a division simply based on rules or materials. Focusing on such powers of attraction, we may thus suggest that the *games* in themselves, and the *playing* of the games, have a possibility to come forward, beyond the concrete traces of these. Hence, we may in the next stage of work, the Coding, attempt to code the characters of the game-related types following the idea of central interests. These we may see as decisive factors within processes of abandonment.

Another way of answering the question of which kind of preferences we possibly are looking at in the archaeological record, may be through the concept of *symbolic capital* by Bourdieu (e.g. 1990, 1999). Besides game-related preferences, we could with the term preferences understand taste distinctions of a more subtle, socially embedded kind. With this, we would get at a different dimension of the game-related objects, far away from the idea of them as traces of idle pastime activities.

c. Symbolic capital: theoretical starting point no. 2

As well-known as the idea that game-related remains are signaling idle pastime activities may the assumption be of them as being markers of social status, in particular when the finds in question are

for example particularly elaborated. A way of translating such ideas to theoretical language may be through the concept of *symbolic capital* by Bourdieu (e.g.1990, 1999). The concept is probably well-known today, but can nevertheless be described as both complex and – among other things due to Bourdieu's own, constant return to different aspects of the term – more extensive than it may at first appear. To begin with, the summary presented by Carle (2003), may be of use for relating the basic points of the concept. According to Carle, Bourdieu focuses on such phenomena as the structure of power in society and the relation between the individual and the structure from a perspective of social stratification. He endeavours to understand why such structures of power, in spite of unequal distribution of influence, nevertheless seem to be reproduced unchanged. By use of the concept of economy in its broadest sense, he points at power in society obtained not only by economic capital, but by various material and immaterial assets transformed into specific values. Partly starting from the focus of phenomenology on society such as it reveals itself for the human in her ordinary life, Bourdieu accentuates behaviour patterns of the 'ordinary' as the actual creator of the structure of society. In consequence, he claims such assets to be searched for in the most ordinary (and commonly seen as trivial) phenomena. He finds these assets in such things as people's choice of living, of education, way of dressing, behaviour and so forth. Phenomena such as these hence become conceptualised into the term of symbolic capital. Constituting an umbrella concept, this is in turn separated into several different forms of capital, of which the main ones relate to 'symbolic'-, 'cultural'-, 'social'-, and 'economic' capital. These point to assets acquired via specific symbols and attributes, through education and mastering of 'proper' culture, through social contacts, as well as via money (in monetary systems). Seeing in the concept of symbolic capital a metaphor for symbolic values given concrete significances, Bourdieu reaches the conclusion that a social distinction of society is regulated with *taste*. This is because the choice a person makes expresses a particular taste that in turn expresses the life style of a specific social group and their social positions. While being collective in character, taste thus points at different capital assets available for different groups of society. It is therefore essential, as Bourdieu maintains, that distinctions of taste become included when analysing

relations of power positions. It is also important to be aware of the fact that different forms of capital may be provided with different symbolic values according to social positions. When someone moves to another social position, such forms may accordingly transform into other values (Carle 2003:376ff, 385f, 405ff). The concept of symbolic capital seems with this appropriate to apply to some of the features of the game-related finds, such as their recurrently well-made appearance. It is of course difficult to know the 'values' that may have been given to, say, different kinds of material. With specific concern for the collective character emphasized by Bourdieu, however, we may in the next stage of work try to link possible, abandonment-related patterns to such phenomena as taste distinctions. With this focus, we may reach beyond the objects proper to more socially embedded dimensions.

d. Casting sticks, cones, gamesmen and balls: materials to be used

The above lines of thought will be applied on illustrative examples from the results of the previous chapter. Since casting sticks and cones appear in rather large numbers, it may be appropriate to mainly concentrate on these. The theories may come forward more clearly when being used on a more extensive material. Examples taken from other game-related types (gamesmen and balls) may however be of interest as well.

So far, we have 'collected' ways of thinking as to the subject of being left behind, and theoretical ideas concerning how to approach the phenomenon of play. Including a few selected materials, we have arrived at some appropriate Starting unities from which our interpretations can start.

→ Starting unities completed

6.2.2. Coding
Starting from Relation-worlds →

We may now follow the advice of our second archaeological starting point, that of Relation-worlds, and concentrate on the sorting out of repetitive details with the aim of distinguishing constructions of play.

a. *Alea* versus *agôn*

If we follow the interpretations of Mackay, the game-related types casting sticks and cones may be suggested to illustrate the two categories of games termed by Caillois as *alea* and *agôn*. As we recall, the casting sticks were proposed to have been used in some game related to chance. The suggestion by Mackay was that they were perhaps aimed to fall in a similar way as was possibly the case with game-related 'throwing-sticks' found in the grave of Tutankhamen. In line with these thoughts, the casting sticks would come to represent the category of *alea*. As to the cones, these were concluded by us to be made up from different kinds of cone-shaped objects. They were of gamesmen-like shape ('round topped cones', 'pointed cones' and 'straight-sided cones with definite head'), as well as of a type which was narrow and high, or short and thick, with a pointed top ('small cones with pointed tops'/'small cones'). Concerning the latter, Mackay proposed the items as perhaps having been thrown, point first, in some kind of game which in that case would apparently require skill. Concentrating on this particular type, which we proposed as possibly constituting the largest sub-type within the group of cones, we could accordingly suggest that at least a part of the cones belonged to the category of games termed by Caillois as *agôn*. Now, the *consistencies* that are to be seen within these two types of objects such as in material and form, or kinds of wear, may with the idea of central interests in mind not only be related to superficial distinctions between games of chance and games of skill. Rather, they may represent deep-going, but different, inclinations in the human being that manifest themselves in repetitive, material details. One such detail may be seen in the fact that the casting sticks are almost invariably made of ivory, another in the circumstance that they conform to particular shape-groups. As to

the cones of the pointed top-type, they are likewise mostly made of one, particular material (terracotta), as well as found in a limited number of sub-types. Concerning wear, we may recall the observation by Mackay that the cones of the pointed top-type in almost all cases have a broken point. Details such as these can be seen as different, conscious or unconscious, choices in how to *enact* particular central interests. The differences thus seen between the two types receive with this line of thought meanings that go beyond the material exterior. They imply changeable divergences in immanent powers of attraction in the past.

The repetitive details in material, form and appearance of finds of the same type may furthermore be seen as a consequence of the significance and power of the central interests. While the game and the playing of games become of primary concern, it follows that the implements utilized in the game become reduced to secondary importance. A modern example that illustrates this could be the pack of cards handed out for free by a company as advertisement. Although well usable for play, one does not usually put much value in the cards themselves. If one would gamble on something, it would likewise not be a matter of great concern of what to gamble on. A suitable example can be taken from (children's) playing with marbles. Alhough a few marbles may perhaps be regarded as exceptional, the majority may look more or less the same since the goal tends mostly to be to win not a few, particular marbles, but as many as possible. The appearance and properties of a game-related object would thus only be counted on in regard to its use in the game in question. That is, there may be no particular necessity to single out or to embellish the item with extra, non-game-related features.

If we consider the finds as to a large part representing features of abandonment, we may not see them as mirroring any play practices directly. Rather, they reflect patterns in their abandonment phases, as was stated above. Here, we could perhaps have suggested seasonal abandonment to play a part. The inhabitants of Mohenjo-daro were though probably not to a large part made up by people moving around on a seasonal basis (such as herders). While the settlement has been suggested as a centre for production and administration, surrounded by agricultural land (Jansen 1986:237f), the inhabitants appear to have mostly constituted residents of some

kind of 'upper classes' (Possehl 2002:211f). Instead, we may have a look at the building technique of the settlement. As was mentioned in Chapter two, at least parts of the settlement were built on platform substructures of mudbrick. In addition, single buildings could also be provided with their own substructures. These have been assumed to have been erected to protect the city from the yearly inundations of the river Indus (Jansen 1986:56, 237f). However, this elevating of buildings through substructures was also a constant, ongoing feature during the lifetime of the city. The foundations of older houses or rooms were recurrently filled with mudbrick or mud to form substructures to new buildings or parts of buildings, a habit which is still to be seen in the province of Sindh (Jansen 1986:197, 202; Possehl 2002:101). The 'abandonment' could hence in more concrete words have consisted of a leaving behind of certain objects, such as game-related items, when a particular room or building was to be filled in. If it was not the game-related objects, but rather the games themselves that counted, it seems reasonable to think that instead of retrieving the items, it would have appeared a better option to fabricate new ones. If so, the game-related finds suggested as of a *de facto*-resembling character could be taken as the indication that such objects had no essential value other than of being used in games. This would account for the number left of these types of finds.

b. Symbols of social positions

A difference in preferences may however be discussed just as well with reference to the opposite side of the game-related finds, namely the *divergences* in shape and appearance seen within the different types. Here, we may return to the casting sticks which represent the most prominent example of diversity, displaying a variety of forms and ornamentations. Such can also be seen among the group of gamesmen. As we recall, according to Mackay, specimens of the type 'cones with incurved sides' display for example a marked variety in colour, material and ornamentation. In this connection, the careful making of a marked number of these game-related finds may be noted as well. As was described in the previous chapter, the casting sticks exhibit for instance in a number of cases traces of red and/or black

fillings, and their ornamentations are said to have been made with striking regularity. Another example is provided by the balls in stone, which according to Mackay are noticeably well polished.

Without knowing anything specific about prevailing ideas concerning what we use to call ‘quality’, we may establish the fact that there existed a number of varieties – various qualities – of the game-related objects, which appear to go beyond what should probably be necessary for game-related purposes. We cannot know for certain what dictated the choice of material and appearance – perhaps specific habits and regulations. Despite this we may, on the basis of the well-made appearances and internal variations, suggest the game-related objects as forms of symbolic capital. With this point of view, they can be supposed to have acted as parts of status strategies, indirectly expressing the social position of its owner, when handled in a game. As bearers of taste, the objects would transform into signs of differentiation (Carle 2003:401). Their properties and differences, acting as taste distinctions, would thus imply differences in social positions. In this connection, we may however also concentrate on the *similarities* in appearance. Only, this time we may look at these from a different perspective in which these gain significance beyond the game-related purpose. According to Carle, Bourdieu makes use of the term ‘freedom’ in his line of thought concerning the reproduction of social conditions. He argues that ongoing transmissions, such as values and opinions transmitted to the young, lead to a kind of freedom when enough is acquired. The freedom, therefore, can only be achieved after a long duration of submission. This leads to the circumstance that social groups possessing the ‘proper’ sort of cultural capital, despite considering themselves as totally free-minded, nevertheless perceive and interpret things according to standpoints resulting from a rigorous transmission such as through education. By use of this freedom as a collective expression, the social group will remain keeping together and thus cause a confirmation of prevalent values (Carle 2003:396f). This offers a way of looking at such similarities in the game-related materials as identical features (identical measurements and the like). Such are for instance seen in the ‘stone pendants ’/’pendants’, which in the previous chapter were suggested to form part of the group of gamesmen. Here, such things as more or less schematized features can be lifted forward as well. One example

may be the few, repetitive variations in ornamentation noted for the sub-type of cones called 'small cones with pointed tops'/'small cones'. Another example may be provided by the rather similar kinds of incised patterns given to large numbers of casting sticks. In accordance with the concept of freedom, 'ordered variations' such as these could indicate spaces perceived of as allowing for a free design, at the same time as the design was being kept under strict regulation. This approach could be used just as well on the fact that the materials under study display marked differences as to conform appearance versus variation. Different kinds of symbolic capital may have demanded or required different degrees of regulated form and appearance. Some types may have been highly regulated, with a limited space for variation. Others, with much less indices of controlled form and appearance, would perhaps not have been in the same 'need' for such space. This opens up for viewing the objects acting as messengers. Types with especially uniform or schematized features are then seen as more essential as such messengers, aimed to secure a certain order.

As seen, the game-related objects come with the idea of symbolic capital to signal something more, beyond the game-related purpose that does not constitute their primary function. As was the case above, however, those game-related finds which we are dealing with here would to a large part constitute abandoned objects. That is, they may be suggested to have lost their (symbolic) significance and become 'out of date'. They would thus have been left behind in the same way as suggested above.

The result of our sorting and coding is accordingly that we on the one hand distinguish constructions of play aimed to satisfy central interests – constructions for *agôn*- and *alea*-related games, respectively. On the other hand, we discern constructions of play aimed at exposing social positions in line with the idea of symbolic capital. With these interpretations at hand, we now proceed to undertake comparisons of the coded materials in order to frame what could be seen as worlds of play.

→ Construction of play completed

6.2.3. Comparison
Starting from Relation-worlds →/Signifying principles →

Through comparisons with the above coded materials, the aim of this sub-section should be to continue searching for and connecting repetitive features following the demands of abduction of inward and outward concordance. The aim should be to arrive at what could be seen as worlds or frames of play. However, when considering *both* of the above suggested viewpoints at the same time – that of central interests and that of symbolic capital – we realize that they are actually heading for a collision. This is the case since we, in the first case, are handling objects with idle, unimportant aspects (the objects appear without intrinsic value), while, in the second case, we are dealing with items displaying aspects contributing to social status (the items come forward with intrinsic value). How can we possibly distinguish a world, or a framework – a totality – within which objects partake that both appear *with*, as well as *without* intrinsic value? Confronting this impossibility, we may stop and look back in order to scrutinize our suggested viewpoints and find out what went wrong along our course.

<u>Objects of status:</u> Starting from the idea of the game-related finds as status-bringing objects, we could now ask ourselves whether these items could at all have been used in the playing of games. A constantly present, status-related thinking would logically impede any functioning worlds of play to arise. We could however simultaneously ask whether any game-related activities, if these became so secondary, would indeed be able to survive in the long run; and in that case, whether game-related objects would be found in such numbers. What is also doubtful from this point of view is why such a number of game-related finds show such a degree of wear, since this does not fit well into the picture of objects held in high esteem.

<u>Utensils for game-related purposes:</u> If starting from the thought of the game-related objects as game-related utensils in line with deeply situated, central interests, we may wonder at the fact that such a number of the objects are manufactured with such carefulness. This is not particularly suiting the picture of objects only valued as game-

related utensil. One could also hesitate as to the marked differences in appearance between different game-related types, and whether the distinguishing into *agôn*- and *alea*-types of objects would suffice as a sole explanation.

Objects of status *and* game-related utensils: The perhaps most doubtful aspects concerning the above viewpoints may as suggested above be the incompatibility of these. That is, objects that are preliminary viewed from a status perspective would in all likelihood not be possible to use for idle pastime activities. Idle pastime activities would in return probably presuppose an absence of utensils permeated with what we here may term seriousness.

Character of *de facto*: Following Seymour and Schiffer, the definition of refuse groups forms a pre-stage for a subsequent defining of activity areas. As quoted in Chapter four, structures can in this connection be seen as "/.../receptacles in which artifacts resulting from activities performed by residents may have been deposited" (Seymour & Schiffer 1987:594). However, considering the extended processes by which humans may abandon things, as mentioned above, the quoted statement should reasonably concern the last activity that the objects in question were involved in, namely their phases of abandonment. This may therefore awake the question *where* the transition between abandoned objects and objects partaking in activities is to be found and distinguished. The main part of the game-related materials was above suggested as forming some kind of *de facto*-resembling pattern. That is, the materials were suggested as, and have been treated as, objects already taken out of their 'true', activity-related contexts. A question that follows from this is whether this constitutes a sufficient explanation for the repetitive features of the spatial distribution. Can this for example really explain such regularities as the above mentioned connections between game-related and non-game-related finds? Can we expect such regularities to be seen from objects that are already abandoned?

In the light of the doubtful points thus listed, the game-related finds stand forward as problematic. They cause trouble, which suddenly appears as a kind of crux of the matter. That is to say, coming so far, we can see that we have not at all moved beyond the objects. Rather,

we have presupposed that the aspects in question are situated within the objects, which means that we have been keeping to an *object-centred approach*. Where 'is' the symbolic capital of our discussion? It is residing inside the objects, which leads the latter to come forward as passive possessions. Where 'are' the central interests of our reasoning? They are situated within the individuals, whereby the objects only appear as representatives for the game or the interest lying behind the game. The emphasis of the 'last activity' has an inbuilt, object-centred direction as well, as it concerns something that has been done with the individual items. Through these perspectives, the object appears in the end as the phenomenon in question. This way of working leads in turn to serious *exclusions*. As concerns the idea of symbolic capital, we must leave out the fact that a number of the game-related finds show signs of wear. From the viewpoint of central interests, we must avoid the question why the objects display so many variations. The suggested idea concerning the casting sticks, to 'let them fall to the ground', does moreover not seem capable of explaining the multiplicity of shapes suggested for this type. Concerning the idea of the game-related materials as constituting some kind of *de facto*-refuse, we must omit those specimens that do not fit in, terming them as 'orphan' to use the terminology by Seymour and Schiffer. The three attempts become with this *standardized* and *uniform*:

Symbolic capital, collective in character, cannot appeal to significant variations, or include odd items of the assemblage in question as something other than odd. As something to possess, the objects become static and immobile. In fact, such a point of view may fall in line with what Bourdieu stresses as a traditional, narrow economism. Based on the idea of reason as the main principle, such phenomena as status and competition, as well as the striving for maximum profit, become universal preferences, acted out by economic subjects (Bourdieu 1990:47, 50). According to Bourdieu, this describes a treatment of pre-capitalist economies by using expressions of economism, showing a "/…/most subtle/…/ethnocentrism" (Bourdieu 1990:113).

The idea of central interests made us believe that we had found a more fruitful alternative to more superficial partitions between different games, such as between games of skill and games of chance. Now, we may conclude that this effort was somewhat false,

since our path, in the end, has not lead us into particularly changed ways in how to approach the game-related materials. In reality, the central problem with the division between skill and chance seems to remain. If casting sticks are permitted to fall with even a little precision, the action would turn the game into one of skill. Another problem includes such examples as the fact that for example dice games in some parts of the world can be viewed as games of skill (cf. Csikszentmihalyi & Bennett 1971:49). The border between the two types of games appear as both floating and culture specific, whereby this outline likewise can be accused of ethnocentrism. There should moreover reasonably exist elements of all the four interests within most humans, which gives something vapid to the idea. The central interests appear as an eternal, inwardly situated essence. In this connection, the emphasis that according to Lönnqvist is put forward by Scheuerl on play as being also situated 'outside the subject' may be noted. Following Scheuerl, in order to start playing, such outside-situated things are for example needed as materials, rules and partners (Lönnqvist 1992:73). At this point, we may also criticize our thought concerning the idle pastime, which similarly seems to lack any considerations for exterior conditions. Using the terminology of Bourdieu, our use of the central interests may with this be suggested to follow in line with the idea of 'mechanical determinism'. That is to say, the very opposite to the thinking based in reason and rationalism, within which choices rather depend on structural constraints than on any conscious, universal preferences (Bourdieu 1990:46).

The term *de facto* comes in a similar way forward as a collective term without room for variations and odd finds. We have previously noted that there are a number of limitations as to whether the materials in question constitute true *de facto*-refuse, due to various shortages in the sources at hand. However, these kinds of source problematic aspects would probably become even more prominent and difficult to handle when focus is directed on the objects (that is to say, when focus is directed on every individual object). The usability of terms such as 'refuse' and 'abandonment' should moreover reasonably be doubted when handling game-related objects.[185] To this,

[185] An illustrative example may be taken from the habit of re-using (broken) objects as game-related utensils. Such habits have been noted by the present author in villages

we may add the difficulties mentioned by Seymour and Schiffer as to the distinguishing between behaviour patterns and formative processes. Applying this idea, we seem to arrive at a picture divided in two halves: one, that is formative but inanimate, consisting of remains; and another that is characterized by action, but situated markedly far away (and thus in reality out of touch).

With these viewpoints, we seem to be deprived of the possibility to get at the specific, as well as to consider immediate, exterior circumstances. The ordered pattern of our interpretations hence comes to signify something static and unchangeable, something that constantly *has been*; a finished event, which therefore with necessity is without the latter. In the light of this, the idle pastime activities would become of an even idler character, as well as appearing without durability. Is it for example reasonable to think that 'dropping sticks to see how they fall' in the long run can appeal so much to deeply situated essences of interest, so that traces of it can still be seen in modern time? May this seemingly boring game indeed fulfil those kinds of immanent demands that have been implied in this context? The ultimate effect appears to be what we may call *loss of excitement*, which is to say that we end up having apparently lost the very spirit of play. At this point, we have got something which can be described as a domino effect. The last stage of work – that of Comparison – is thrown over by the preceding stage, which is in turn thrown over by the ideas developed in the first stage or compartment, whereby the whole row is falling down. Facing this, it becomes clear that we, if aiming at reaching the phenomenon of play, must start all over, and from a totally different point.

– search session interrupted –

Coming this far, the following questions arise: how can we proceed from something that is already finished to something that is ongoing? How can we proceed from seeing the finds as nothing but remains to re-create aspects of human life through them? How can we break with what is static to reach at changeability and anchoring in contexts?

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in Karnataka, India, where broken plastic bracelets are recurrently re-used as gamesmen.

How can we, to be concise, approach the game-related materials in ways that go beyond these, along tracks that can present more tenable constructions of play, as well as functioning frames of play?

In order to answer, let us have a closer look at some of the above stated, critical points:

- *De facto*: on the basis of the finds as being left behind, the matter came to concern whether the objects were abandoned or not. Focus came to be directed on the finds as already involved in formation processes. That is, they were seen as already taken out from underlying patterns of action, from which they were irrevocably separated. *Reflection*: one of the problems in this connection seems to apply to the very term abandonment. The question is whether this term could become loosened up and turned less specific, whereby it in turn could contribute to a less sharp distinction between behaviour pattern and formation process?

- *Central interests*: grounded in the thought of idle pastime, the objects were divided up according to their possible belonging to inner areas of interest, deeply situated within the human being. Exterior and with this more socially stressed circumstances were accordingly not touched upon. Instead, the emphasis on inner essences provided the viewpoint with a mechanical-deterministic feature. The central interests in question came to be represented by games described as for example the 'dropping of sticks'. *Reflection*: the question here is whether the idea of idle pastime could be broadened to include an exterior context, which in turn could tune down the interior and deterministically steered feature of the areas of interest? One could also ask whether the game-related descriptions in similar ways could be broadened by being made less exact?

- *Symbolic capital*: the game-related objects were viewed upon from a perspective of possession. They were interpreted as humans' holdings of valuable, symbolic capital in a traditional, economic sense, whereby the objects themselves stood forward as passive. This went in line with the idea of universal

> preferences concerning such things as status and the striving for maximum profit. It also went in concordance with the thought of the rational, consciously acting subject. *Reflection*: the question in this context is whether the view of the finds as representing symbolic capital could be broadened, so that the objects instead of appearing as passive possessions could be seen to be more involved in the shaping of capital? Which in turn could loosen up the thought of the sovereign and explicitly conscious subject?

What accordingly is of concern for all three points can be said to be different forms of broadening, which in turn seems to point at different ways of getting out of far too firm definitions. How, then, can we in a more tangible way avoid that which is too certain? This will constitute the task of the next level.

6.3. Connecting game-related moments to social contexts: searching for pattern (Level 2)

In the previous level, two different viewpoints on the game-related finds were presented. At first, the finds were approached as traces of idle pastime activities. Secondly, the objects were viewed as having constituted valuable possessions. When frames of play were being searched for, that is, when the two standpoints were to be considered together, it turned out that they were incompatible with each other. As subsequently shown, the main reason for this was our maintaining of an object-centred approach. Following the reasoning by Bourdieu, these two standpoints illustrate the two traditional, oppositely situated ways of thinking that according to him tend to divide social sciences. The aim of this level is to find a way that does not unite to either one of these two lines of thought, but presents an alternative way that can proceed 'beyond the objects' to suggest worlds of play to be seen in the studied materials. To begin with, a presentation of the two ways of thinking, together with their shortcomings, will be described through concepts borrowed from Bourdieu.

The ‘rational actor’-point of view: If we look at the game-related finds as valuable possessions, it means in a Bourdieuan way that we take on the ‘rational actor’-point of view. This sees the origin of acts in consciousness and every practice of the actor based on one, single principle – that of reason. This has in turn the effect, as Bourdieu formulates it, that consciousness and thing appear totally separated, lacking a socially constituted agent. On grounds of this economically unconditioned subject, the theory excludes inquiries into any social or economic conditions of economic dispositions. Questions referring to any conditions of ‘lived’ experience of the social world, within which one apprehends the world as taken for granted are thus leaved out. That is, the very *meeting* of – as well as the *negotiation* between – the objectified and the incorporated structures is excluded (Bourdieu 1990:25f, 45ff). In consequence, while avoiding this negotiation between what we may interpret here as the individual self and the outer world, we reach to a point where nothing can happen beyond the material remains in question. They become the passive consequences of past efforts of reaching at maximum profit. We arrive at the static, object-centred situation that constituted one of the main problems of the previous step.

The ‘structural’ point of view: If we approach the game-related finds as traces of idle pastime activities, it means in Bourdieu’s words that we connect with the ‘structural’ line of thinking. In this, every partaking element becomes characterized in relation to the others into an all-embracing system. Instead of focusing upon the very logic of the practices and the objects in terms of their relations, one only searches for correspondences within the different areas of practices. By this, the discourse tends to let the model account for practices; that is, the model turns into a power capable of determining the practices. This in turn makes the correspondences run the risk of becoming a danger because they are treated as real principles of practices instead of tools (Bourdieu 1990:4ff, 11, 37). The practices become stripped of everything that distinguish them as practices. Namely the uncertainty and fuzziness – the *air of risk* – which is caused by the fact that they are not composed of sets of conscious and constant rules but practical schemes that vary depending on the logic of the situation. It is therefore not possible to analyse the conditions of the production with

this method, those conditions which make it possible to take the meaning for granted (Bourdieu 1990:12, 26f). Seeing in the game-related finds traces of idle pastime activities, which is to say, viewing them as a separate and universal element within a larger system, can accordingly with this line of thought be suggested a cul-de-sac. This is particularly the case since this element, out of this viewpoint, lacks any functional significance (in the sense of reaching out of itself), whereby it comes to have no particular influence on the system as a whole. Ignoring the *air of risk*, it should moreover be impossible to come close to feelings such as enjoyment and the like. In consequence, we have no possibility to reach beyond the objects in question.

In his criticism of the two traditional viewpoints, Bourdieu particularly focuses on the effective avoidance within both lines of thought of an 'uncertain present'; the *negotiation* and the *air of risk,* which prevails within the primary, lived experience of the social world. Now, if we with this uncertainty would understand the excitement, which we in the previous level could establish as missing, we should perhaps not strive for a way in which such uncertainty/excitement could be *kept*. Rather, we could let our idea concerning the three different kinds of broadening (which were suggested at the end of the previous step) grow out of this idea with the ultimate aim of *arriving at* such uncertainty/excitement. That is, we could let our approaches concerning a broadening be more grounded in and guided by the above reasoning by Bourdieu. With this view, we attain (a) an emphasis on the difference between what was and a prevailing present, which goes in line with our criticism of the concept abandonment. In light of this difference, it becomes necessary to adjust this term in order to make it come closer to a prevailing present. We furthermore (b) reach an emphasis on the relational, which highlights the question of inner choices of individuals versus a surrounding social exterior. Lastly, we (c) get an emphasis on 'to be' rather than 'to have', which connects the concept of symbolic capital to the idea of 'what happens' in the game in question. What we hence should primarily focus upon in the repetitive patterns is the distinguishing of moments of uncertainty/excitement. Or, more concretely speaking, spaces for actions of a relational character. The question concerns:

- Where and when can game-related moments be distinguished with regard to the repetitive pattern?

6.3.1. Collection of data
Starting from The moment of being left behind →

We can see the two opposed scientific angles of approach as underlying causes to the two simplified views on the game-related materials as status possessions and as traces of idle pastime activities. According to Bourdieu, these angles reflect our inability to avoid a dualistic way of thinking. We tilt our analysis "/.../from the model of reality to the reality of the model" (Bourdieu 1990:36ff). With this, we can also observe that we ourselves construct the problem. How, then, can we eliminate this obstacle and find an alternative way of working? To begin with, we may continue with the criticism by Bourdieu to analyse the components of the problem more thouroughly.

a. Tripartite way of working: theoretical starting point no. 1

According to Bourdieu, we would avoid this ontological problem if we would realize that the problem originates in the 'un-analyzed element'. With this term, he points at the lack of calling into question those presuppositions upon which the objective relation of the theorist rests, depending on his or her subjective relation to the social world. The presented problems could thus be avoided, if the researcher in this way could be able to objectify his or her relation to the object (Bourdieu 1990:29ff). More concretely speaking, it concerns the difference in *distance*. To be native, to entertain learned ignorance represents with the formulation by Bourdieu the practical relation to the world, a relation filled with un-self-confident, immediate understanding. To objectify thus implies a recognition rather than a denial of this distance; to"/.../discover externality at the heart of internality, banality in the illusion of rarity/…/" (Bourdieu 1990:9, 21). What it is about can in different words be said to be to call into question the

taken for granted *beforehand*, which constitutes the constant dilemma of the researcher. This is the case since, as Bourdieu continues, the logic of practice implies a forgetting, following from the circumstance that the practical belief is grounded in the 'state of the body'. The body is in its turn without reach of a consciousness; one *is*. With such a description of bodily movement, we have hence the possibility to reach at the moment of uncertainty and raise it to the level of consciousness. Out of this, according to Bourdieu, an analytical sub-division can be made so that we get at a twofold reality, consisting of the *objectified* and the *incorporated* (Bourdieu 1990:56f, 68f). These two parts can however only be reached through the principle of the dialectics. In order to gain knowledge of the social world, we must in other words return to practice, since in this context it is the same as the place for the dialectics. Thus concentrating on the body scheme, we get a possibility to reach an ordering principle that is both unconscious and systematic (Bourdieu 1990:10, 52).

This reasoning brings us back to our 'critical points' and the above mentioned words concerning the three kinds of broadening in order to avoid an object-centred approach. Based on the line of thought by Bourdieu, we should through the attainment of moments of uncertainty be able to reach an emphasis on a prevailing, momentary *present*. Through the principle of the dialectics, we should in turn be able to distinguish these moments of uncertainty via *relational* contexts. Through the emphasis on body schemes, we should be able to discern the principle of dialectics via an accentuation of *bodily movements*. In reverse, we should hence by (1) a search for bodily movements (2) become able to distinguish relational contexts, through which we thereafter (3) should be able to reach the momentary present (or, rather, a number of momentary presents). The first point thus shows a broadening of the critical point 'to have'; the second point displays a broadening of the critical point 'inner choices'; and the third point constitutes a broadening of the critical point 'abandonment'. With this line of thought, we should be able to reach beyond the problematic, object-centred focus of the previous level.

In order to reach at these stages in a more tangible way, we may begin by considering some qualities of the *systems of representation* by Hall (2003/1997). This may provide us with a more concrete grip of the second point.

b. Twofold systems of representation: theoretical starting point no. 2

The constructionist idea of *systems of representation* by Hall (2003/1997) was described as to its basic layout in Chapter four. Shortly summarizing, the concept of representation can be said to constitute the process by which we link the three elements 'things', 'concepts' and 'signs'; the relation of which according to Hall constitutes the core of our creation of meaning. To manage this linking, which may not always be logical but rather of arbitrary relationships, we make use of the *code*, which sets the correlation and thus stabilizes the meaning until it seems inevitable (Hall 2003/1997:20f). While this implies that meaning cannot be inherent, neither in the thing nor in the word, as well as cannot either be seen as finally fixed but must always be subjected to changes, it stands forward as produced through our active engagements within *signifying practices*. These are the practices of interpretation, our undertakings of encoding and, at the other end, decoding (Hall 2003/1997:23ff).

As was already touched upon in Chapter four, a certain kind of double quality may be suggested to be seen together with this concept of Hall's. This concerns the double process of encoding and decoding. The finds can be taken to represent past, particular systems of representation, which is the same as to say that they stand for particular processes of encoding and decoding. Since *en*coding is as necessary as *de*coding, what they primarily come to represent are traces of engagements. One cannot solely decode a thing, but would rather need to put it in relation to something else; to let it engage with. What can be observed cannot accordingly stand for any completed, finally fixed processes, but rather continuously ongoing processes. The game-related finds can with this be suggested to constitute a language for the past individual(s), a language constituted by the set of (bodily) movements that the thing implies through its particular concept(s). Here, 'movements' is to be understood in a broad sense, not only referring to 'rolling the ball in this or that way', but also including such dimensions as 'being excluded from a particular set of movements' and such. Starting from this double quality, a way opens up to spaces in-between the finds, whereby the researcher has the possibility of tracing codes or, in more concrete terms, tracing meanings. This is possible since these, as the double quality implies,

cannot be inbuilt in the thing. Rather, they are of a relational quality, which means that they are to be found in the spaces in-between. This may appear somewhat abstract and difficult to convert into practice, but a suitable illustration may be found by returning to Hall's own example of the traffic lights.[186] As we recall, what is actually signifying in this case is not the colours by themselves, but the difference between them. What is accordingly shown by this example is that our search for relational contexts, which we can concretize further by letting them stand for find-contexts, can preferably come to be about a focus on *differences*. Since the language for the past individuals is suggested as made up from sets of movements implied by the things, the search for differences becomes moreover, in a wide sense, grounded in *bodily movements*. With this, we proceed from a rather theoretical outline to reach a more tangible way of working.

How, then, can we in the game-related finds distinguish traces of bodily movements? Here, we may return to Fritz (2004) and focus on the idea of his that constructions of play can be sorted according to four different *orientation areas*.

c. Fields of bodily movement: theoretical starting point no. 3

Following Fritz (2004:49ff), play constructions can be said to crystallize according to four areas which he terms *symbols, rules, bodily movements* and *thought processes*. The first area concerns such things as playing with dolls; the second applies for example to card games and the like; the third concerns functional playing aimed at bodily control; and the fourth refers to such things as mathematical puzzles.[187] All areas have to be included in order for a functioning construction of play to take shape. Different constructions of play are however at the same time positioning themselves differently depending on which area or areas they are being drawn to. According to Fritz, the four

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[186] See Chapter 4.

[187] The corresponding, German terms are *Symbole*, *Regeln*, *Körperbewegungen* and *Denkprozesse*. This line of thought can be said to further develop and partly criticize the classification by Piaget and his followers of children's play into games of function, symbols and rules (Fritz 2004:49f).

areas can thus serve to distinguish different constructions of play while providing an insight into the inner structure of a specific construction, such as what it is constituted by, or by what principle it is ordered and the like. Here, the four orientation areas are treated as different *fields of bodily movements*. 'Movement' could in this context be understood as to what part or parts of the body are being accentuated.

Which types, then, appear in this context to be of particular interest to focus upon?

d. Cones and casting sticks, gamesmen and long dice: materials to be used

It would seem particularly interesting to return to the cones and the casting sticks since the interpretations of these in the previous level turned out to be rather inadequate. Based on the model of fields of bodily movements, we may however start by looking at those kinds of game-related finds which appear to resemble the cones and the casting sticks the most, namely gamesmen and long dice. As concerns the latter two types, we may presume that we are more familiar with them, due to their respective similarities with today's game-related utensils. In our interpretation, we can accordingly follow a division between 'certain' and 'uncertain' objects. The gamesmen and long dice would thus fall into the category of certain objects, while the cones and casting sticks would be viewed as uncertain.

Before we can start to code our collected data, we must consider in which way we may look at the leaving behind of the objects. Based on the critique that turned up in the previous level concerning the distance between behaviour patterns and formation processes, it is close at hand to try to distinguish a state where 'behaviour' and 'definitively left behind' could come nearer each other. Here, we could gain inspiration from the *fragmentation premise* as formulated by Chapman and Gaydarska (2007).

e. Abandonment mobility: the moment of being left behind

The *fragmentation premise* (Chapman & Gaydarska 2007) concerns the deliberate breakage and re-use of things, a theme commonly neglected in traditional archaeology. Inspired by this, we could, in a similar way but by changing the words fragmentation and breakage, ask for the deliberately *abandoned*, then re-used thing. This would offer a way of letting the term 'abandoned' come closer to 'behaviour'. The aim of the volume by Chapman and Gaydarska is to lift forward and explore the consequences of deliberate fragmentation as to social practices such as production and deposition. The core of the book concerns the "/…/material network symbolising collective memory and reinforcing *social relations*" (Chapman & Gaydarska 2007:2, *my italics*). They argue that fragmentation constitutes but one of several stages in the life of objects, and that every succeeding fracture can be taken as a separate story. Here, we could use the same words but argue that every stage of abandonment has its own story to tell. According to Chapman and Gaydarska, in traditional scientific thinking, the isolated part "/…/could never be autonomous – /…/the part [always] implied a relation, not a separate entity" (Chapman & Gaydarska 2007:2). Following from this, the brokenness of objects was not particularly focused upon or thought of as caused by human intentionality, but merely seen as the result of taphonomic processes or breakage by accident (Chapman & Gaydarska 2007:2). While sharing this critical point of view, 'abandonment' may here be taken as not so deliberately decided upon through conscious thinking, but rather as something occurring in-between the unconscious and the intentional in line with the dialectic process maintained by Bourdieu. Such abandonment may be seen as rather instant, caused by the end of the game or through sudden (socially dependant) changes in taste and preferences or through changes in fashion, and it may be short- or longer lived. This kind of abandonment could hence be suggested to exhibit more or less the same spatial pattern as the particular items may display when being used in play. We accordingly come to emphasize a view in which the handling of the objects can include a number of different varieties in the way the objects were abandoned – from 'leaving them on the shelf when not playing' to the definitive abandonment. With this perspective, we attain an *abandonment*

mobility, which is to say that we gain access to bodily movements of both a playing- and a leaving-character. The two phases of playing and leaving can thus be said to overlap each other. What is hence particularly accentuated in the heading 'The moment of being left behind' is not the 'being left behind' but the 'moment', whereby the bodily movements come to be about the *present*. Those moments which we here understand in a concrete way, can thus at the same time be taken as the prevailing present, which we in line with the reasoning by Bourdieu are aiming at.

So far, we have collected possible starting unities upon which our interpretations may be built. That is, our aim is formulated as the distinction of 'in the present prevailing playing/leaving-practices' through relational contexts, reachable through fields of bodily movements.

→ Starting unities completed

6.3.2. Coding

Starting from Relation-worlds →

Following the second archaeological starting point, that of Relation-worlds, what is at issue is to analytically subdivide in order to distinguish repetitive details that, in the end, can show at tenable constructions of play.

a. Fields of bodily movements

According to the above outline, what is of primary concern is to distinguish game-related fields of bodily movements. We may begin by considering the cones and the casting sticks in light of their counterparts gamesmen and long dice. Concerning the group of gamesmen, it is easy to imagine these as such, since their suggested form is similar to modern gamesmen. The same can be said about the

long dice, which resemble the kind of long dice that are used today.[188] Gamesmen and long dice can accordingly be suggested to be more 'certain' types in the light of the more 'uncertain' types 'cones' and 'casting sticks'. As to the cones, they can be suggested to have certain features in common with the gamesmen. As was shown in the previous chapter, the type has been suggested to contain different sub-types. The 'round topped cones' and the 'pointed cones' only differ from the group of gamesmen by the supposed incurved sides of the latter. Despite their narrow and high/short and thick appearance, the 'small cones with pointed tops'/'small cones' can be proposed to resemble a gamesman-like object as well. In light of this, it is close to hand to suggest the cones as having functioned as some kind of gamesmen. As to the casting sticks, they resemble the long dice in both form and material, as well as in ornamentation. The only difference is that the casting sticks have the same pattern on all sides. It is thus tempting to interpret them as having functioned as some kind of dice. Now, following Fritz' idea of orientation areas, cones utilized as some kind of gamesmen would point at an orientation towards the area *rules*. Casting sticks handled as some kind of dice would likewise fall into the area of *rules*. Translating this area to bodily movements, it would include movements relating to the moving and throwing of objects according to rules, while such things as markedly physical movements or ultimate mental concentration would be less pronounced. However, at the same time as suggesting the objects to belong to this kind of field of bodily movement, we may wonder at *why* the cones differ in the way they do from the gamesmen; or *why* the casting sticks have the same pattern on all sides.

Because of these doubts, it seems worthwhile to more thoroughly scrutinize the distinctions between the 'certain' objects and their 'uncertain' counterparts out of a variety of variables that can give information as to bodily movements (the variables as well as the outcome of these are taken from the presentations and results of the previous chapter):

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[188] Long dice may not be so common in Western contexts, but are frequently used in South Asia. For more on this, see Chapter 3.

		Material properties and wear	Variation/ homogeneity in design	Number	Spatial character (horisontally)	Spatial character (vertically)	Closeness to streets	Connection with other game-related types
CERTAIN	**Gamesmen**	Great variety/ homogeneity in material, depending on sub-type	Great variety/ homogeneity depending on sub-type	Mentioned as numerous in report. In DK-C and HR relatively few	Largely single, spatially 'forming part of' in DK-C. Similar pattern in HR	Depth intervals 0-1 m and 1-2 m. Larger number and greater variation closer to surface in DK-G	Generally not found close to streets	Occur with other game-related types
	Long dice	Mainly ivory. Polished by much use. Some examples bluntly pointed ends	Partly homogenous	Mentioned as numerous in report. In DK-C and HR relatively few	No information	Depth intervals 0-1 m, 1-2 m and 2-3 m	No information	Found with casting-sticks
UNCERTAIN	**Cones**	Great variety/ homogeneity in material, depending on sub-type. Pointed cone almost vitrified. Point usually broken	Great variety/ homogeneity depending on sub-type	Mentioned as numerous in report. In DK-C and HR relatively large number	Partly single, partly clustered, spatially confined in DK-C. Similar pattern in HR, although not confined to one area	Depth intervals 2-3 m, 1-2 m, 3- m and 0-1 m. Larger number and more typical appearance at greater depth in DK-G	To a certain degree close to streets in DK-C. To a marked degree close to streets in HR	A closeness to balls
	Casting sticks	Mainly ivory. Polished by much use. Some examples bluntly pointed ends	Great variety	Mentioned as numerous in report. In DK-C and HR relatively large number	Markedly clustered and separated in DK-C. Similar pattern in HR	Depth intervals 0-1 m, 1-2 m and 2-3 m. Greater variation at greater depth in DK-G	Generally not found close to streets	Found with long dice

Based on this information and beginning with the cones, we may consider the above suggestion that the cones constituted some kind of gamesmen. If used in the same way as the group of gamesmen, how come that we see differences in spatial distribution between the cones and the gamesmen? And why does the sub-type 'small cones with pointed tops'/'small cones' almost always have a broken point?

Considering the outcome of the variables, it could be worthwhile to consider some other kinds of games in which the cones could have been involved. Here are two examples:

- Gamesmen for game board with holes: according to Vasantha (2008) there exists today among the Mohana[189] a board game made up of a wooden game board with rows of holes, to which pieces belong that are similar to the sub-type 'small cones with pointed tops'/'small cones'. When playing, the cones are stuck point first into the board. This is supposed to have developed in the unstable surroundings provided by the traditional house boat of the Mohana. The idea would lend this sub-type of cones local ties. It could furthermore explain why some of the cones of this sub-type are not made to stand properly. It seems however a bit unlikely that the hard baked cones would lose their points by being handled in such a way.

- Pieces for the game of skittles: the game of skittles may be suggested to be a world-wide phenomenon. When looking into literature on play and gaming from around the world, one comes across a great variety of skittles, both large- and small-sized and with flat as well as more or less rounded bases (e.g. Grunfeld, et al. 1978:194f; Racine 2007:95ff) (fig. 6.2.). Suggesting the cones, or possibly only the sub-type 'small cones with pointed tops'/'small cones' as skittles could explain the hard-baked quality of this sub-type, as well as its recurrently broken point. The idea could be further strengthened by the indicated proximity of the cones to balls, and perhaps also by the fact that they are partly found in connection to streets.

[189] A group of people native to Sindh, traditionally living on house boats on the river Indus (cf. Shar 1987).

Their spatial differences when comparing them with the gamesmen could with this view also have an explanation.

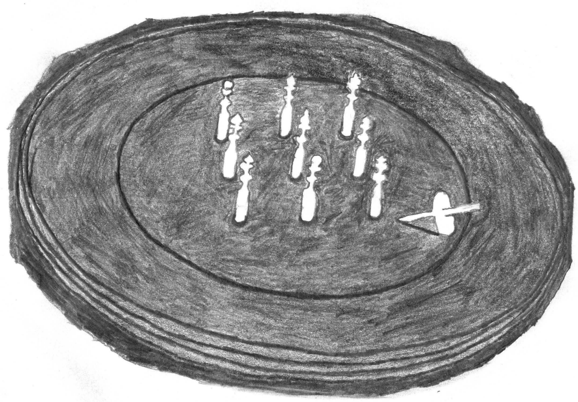


Fig. 6.2. A set of skittles of miniature size (drawing by A. Jönsson, slightly modified, after Racine 2007:98).

Proceeding to the casting sticks, we may consider the above proposal that the casting sticks represented some kind of dice. In light of the outcome of the variables, which above all pointed at a great variety in form and ornamentation, it seems a bit doubtful to think of the casting sticks as 'only' having been used in this way. At the same time, however, their similarities with the long dice appear noteworthy. The list of games to which these objects may have belonged can be extensive. Here are a few examples, based on the above information:

- <u>Dice-counters/tallies:</u> the idea that the casting sticks represent some kind of dice may be enlarged by suggesting that at least part of them may have been utilized as counters/tallies. There exist a number of examples where dice and counters/tallies have been used together when playing games (see e.g. Culin 1895:496, 1992/1907b:50; Grunfeld, et al. 1978:138).[190] The enlarged use as 'dice-counters/tallies' could perhaps better explain the great variety displayed by the casting sticks.

[190] As was mentioned in the previous chapter, in the research literature on the Bronze Age Indus Valley, suggestions of this kind can be found concerning a short, flat and rectangular type of stick with one end ornamented in the shape of one or two birds (in the previous chapter, this type, which was suggested by Mackay as a hair-pin, was included in the group of casting sticks) (see e.g. Kenoyer 2000:Fig. 6.41.) (see fig. 5.25.).

- Pieces for domino-/stick-resembling games: the game of domino is said to have developed in China about 300 years ago (Grunfeld, et al. 1978:106) (fig. 6.3.). Stick games refer to a group of games that was traditionally played by North American tribes (Culin 1992/1907b) (fig. 6.4.). Despite their belonging to geographically specific areas, I have nevertheless chosen to consider these games. As to their significance, the stick games were compared by early researchers with Old World card games (Csikszentmihalyi & Bennett 1971:49).



Fig. 6.3. Having a game of domino (photo by R. Jönsson).

A similar comparison could be suggested for the significance of domino in China. Some game variants of domino can moreover be seen to resemble card games such as poker (cf. Engel 2004:73f; Grunfeld, et al. 1978:108f).[191] What is suggested here is a kind of 'hybrid' between these kinds of games. Domino is in its basic form a kind of construction game. The flat pieces show up two sides with points in different numbers. One of the players put one of his or her pieces on the table. The next player must connect one of his or her pieces to either one of the

[191] In this connection, it can be worth noting that playing-cards are said to have developed from Chinese game-sticks with painted emblems (Grunfeld, et al. 1978:114f).

two sides of the piece on the table, whereby the points on the first and second piece must correspond with each other (Engel 2004:13).[192] While the pieces are today made of plastic or stained wood, they were earlier mostly made of bone (Grunfeld, et al. 1978:106). The stick games form one out of four sub-groups belonging to the type of games known as guessing games (Culin 1992/1907b:227), which, in different forms, is common in many societies (Pusch 2007:82).[193] The stick games existed according to Culin in a number of variants. Basically, the game consisted thereof that a bundle of marked sticks were divided and partly concealed in the hands of one of the players. His opponent had in turn to guess in which hand one particular, oddly marked stick was hidden, or in which hand an odd number of sticks were held. The number of sticks varied from 10 to more than 100. The sticks could be made from for example cane or wood, and were mostly marked with incised, painted, or inlaid, abstract patterns. They ranged from being long and narrow, to short and thick. Sometimes, they were concealed beneath bark or bundles of grass instead (Culin 1992/1907b). In both kinds of games, intricate systems of points are/were used, and they are/were to a large part used for gambling. This 'hybrid' suggestion could at least roughly explain the number and great variety of casting sticks. The different patterns could be interpreted as signalling different symbols or values. The long dice could also fit into this rather broad suggestion, which in turn could explain the similarity between these types.

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[192] What could make the comparison with the classical game of domino somewhat doubtful may be the lack of an underside among most of the casting sticks. However, when considering the amount of variants of domino games that exist today, a number of examples where an underside is not necessary can be found (see e.g. Engel 2004:75f, 81f; Grunfeld, et al. 1978:108f). It could also be suggested that the lack of an underside is somewhat exaggerated, as a similar effect can be obtained with help of some kind of shelter or a small bag within which the sticks could be concealed.

[193] A European example is the 'game of the gold ring', in which a small finger ring is to be hidden in the hand of one of the players (Aeberli 2007:197).

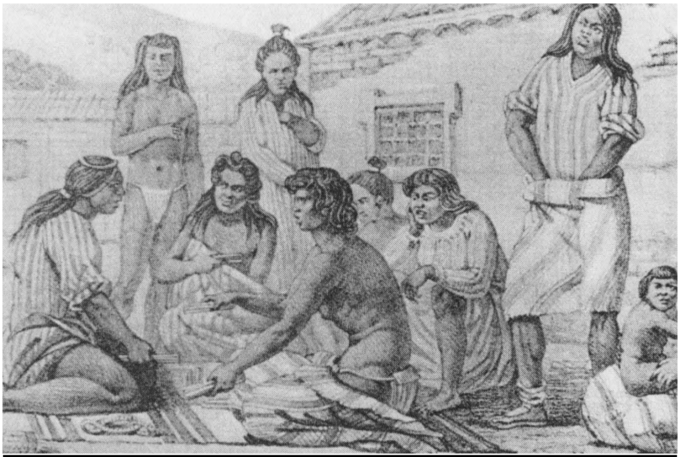


Fig. 6.4. Old drawing depicting a round of stick games (slightly cut down by the author, after Culin 1992/1907b:144-145).

- Utensils for bilboqué/throwing games: The game of bilboqué, to use its European name, constitutes a kind of game of catching (Grunfeld, et al. 1978:252f; Lönnqvist 1992:Fig. 87.). It may not be universal, but a suggestion could be that its (simple) form may have existed independently in different parts of the world. Known as *ajaqaq* among the indigenous people of Greenland, a stick of bone is fastened with a string to a larger piece made of horn or tusk. With an upward movement of the latter, the stick is to be caught into a hole that is bored in the larger piece (fig. 6.5.). The stick may be ornamented with incised patterns, and sometimes there are several holes into which the stick has to be caught following a complex system of points with different values (Grunfeld, et al. 1978:252f). Throwing games refer for their part to all sorts of games were throwing is involved, such as in the game 'rings'. This category of games may also involve items in different forms or differently patterned in order to signal different values (Grunfeld, et al. 1978:173). The noticeable appearance of wear as well as the hard material (ivory) of the casting sticks might be an indication that these kinds of games were played. The variation in pattern could moreover be suggested to denote different values. In particular, the items with 'bluntly pointed ends' (whether long dice or casting sticks) would seem much alike the sticks of bone used in *ajaqaq*.

If considering these kinds of games in light of the four orientation areas as outlined by Fritz, the suggested games hint at greatly different *fields of bodily movement*. As to the cones, the suggestion of them as gamesmen falls into the area of *rules*. As above noted, this would imply a moving of the objects according to rules. The proposal that they may have been used as skittles fits on the contrary into the area named *bodily movements*. Here, such physical movements as 'keeping the hand steady' or 'hitting the mark' may have been of importance. The suggestion of the casting sticks as having functioned as dice-counters/tallies would hint at the area of *rules*. The proposal that they may have functioned as pieces for domino-/stick-resembling games would however imply an orientation towards the area *thought processes*. Here, mental concentration would have been of importance, including invisible movements such as fast powers of observation. The suggested use of the casting sticks in bilboqué/throwing games would point at the area of *bodily movements*. What we hence distinguish through the perspective of fields of bodily movements, are much more deep-going differences between the different types than we at first would have expected. While at first having hinted at the area of rules, cones (as skittles) and casting sticks (as pieces for domino-/stick-resembling games) can be taken to appeal to totally different fields of bodily movements.



Fig. 6.5. The playing of *ajaqaq* (drawing by A. Jönsson, slightly modified, after Grunfeld, et al. 1978:252).

b. Find-contexts

With the systems of representation by Hall, it becomes clear that the fields of bodily movements are not to be found in the *finds themselves*. The finds rather appear as signals for such bodily movements. They turn into signs, which – for me as a researcher as well as for the individuals of the past who were involved with them – can be connected to a language. What becomes of importance is thus the actual find contexts of the objects. These appear as indications of bodily movements, which is the same as to say that 'bodily movement' appears as a social ritual with symbol-bearing function. Since the 'connection' is grounded in the idea that meaning is relational, it should become possible to trace through a focus on *differences in properties*. It is the find context in a literal sense that comes into focus here. Guided by the idea of fields of bodily movements, a number of aspects of the find contexts will here be considered. As an illustrative selection, two of the above suggested games are chosen: cones as skittles, and casting sticks as pieces for domino-/stick-resembling games (here, casting sticks of both group 1 and 2 will be considered). The choice is grounded in the fact that both of these suggestions were to large parts found to correspond with the variables. They moreover signal markedly different fields of bodily movements. Here, we will also choose two areas as well as two localities in which these objects dominate: the area 'South' and thereafter the locality 'bl 12 south-east' in the area 'South' (for cones); and the area 'Middle A' and thereafter the locality 'bl 5-7-8' in the area 'Middle A' (for casting sticks). What is of concern is to single out variables, which in different ways can be related to the field of bodily movements of the game category in question. The search will be based on differences. These refer to differences between the contexts for cones and casting sticks, respectively. The 'find contexts' become the sum total of connections that we in this way discover between the objects and the properties of their surroundings, connections that can be related to the two fields of bodily movements (the aspects are taken from the presentations and results of the previous chapter):

<u>Areas:</u>

Cones: dominate the area 'South' and contribute considerably to the character of even appearance of this area. The character of the cones can be described as partly single, partly clustered, while at the same time spatially confined. A cluster of cones is found in a street.

Casting sticks: dominate the area 'Middle A' and contribute greatly to the character described as a limited space of particular concentration of this area. The character of the casting sticks can be described as markedly clustered and separated. They are generally not found in connection to streets.

<u>Numbers and types of game-related finds:</u>

Cones: in the locality 'bl 12 south-east' can 25 game-related objects be found. 14 finds represent cones. Thereafter can 4 dice, 3 gamesmen, 3 balls (in terracotta), and 1 tetrahedron be found. Cones are in majority.

Casting sticks: in the locality 'bl 5-7-8' can 65 game-related objects be found. 39 finds represent casting sticks. Thereafter can 12 balls (to a large part in stone), 5 dice (probably long dice), 5 gamesmen, 3 cones, and 1 tetrahedra be found. Casting sticks are in overwhelming majority. Most casting sticks are found in the central and southern parts of the locality, while the other finds are mostly found in the central and northern parts.

<u>Numbers and materials of other finds:</u>

Cones: within the locality 'bl 12 south-east' can a number of finds in terracotta be found. The locality is especially abundant in toys and figurines in terracotta (in relation to other localities). The locality is rather rich in finds (in relation to other localities).

Casting sticks: within the locality 'bl 5-7-8' can a number of finds in other materials than terracotta and pottery be found. The locality is especially abundant in seals (in relation to other localities). The locality is rather poor in finds (in relation to other localities).

The *markedly different* localities lay stress upon the differences between the two fields of bodily movements. Cones appear *more mixed* with other game-related, as well as non-game-related materials. This is seen both in their spatial character and in the fact that they do not appear as an 'overwhelming' majority (which the casting sticks do). The mixed appearance can be further strengthened by the fact that the

locality in question is relatively rich in finds. Casting sticks stand forward as *less mixed*. This is shown in the fact that they appear in an overwhelming majority, as well as in the circumstance that the locality in question is relatively poor in finds. We can moreover see a difference as to the presence of non-game-related finds in the two localities. In 'bl 12 south-east', large parts of finds in terracotta, particularly toys and figurines, can be seen. In 'bl 5-7-8', large parts of finds in other materials than terracotta and pottery can be distinguished. Here, a relative abundance of seals can be seen as well. On these grounds, a possible *broadening* of the category of objects belonging to the game of skittles and the domino-/stick-resembling games, respectively, could be made. In the first instance, we may wonder whether such things as toys and figurines in terracotta could in some way have been included as well. The connection to balls may not be particularly obvious in the locality 'bl 12 south-east', but the balls can be said to nevertheless 'fit in', because of the fact that they are made of terracotta. In the second instance, the five dice of the long type could be noted; these were suggested above to have perhaps been included in some kind of domino-/stick-resembling games. The relatively large number of stone balls that were found in this area may possibly have formed part of such games as well. As we recall, Mackay doubted that the balls in soft stone could have been used for rolling purposes. Looking into the compilation of guessing games among the North American tribes by Culin, however, a group of games can be found where balls were occasionally included. These balls were in a similar way as the sticks in the stick games meant to be concealed (Culin 1992/1907b:335-382), which means that they were not used for rolling purposes.

In the light of the different fields of bodily movements that the cones and the casting sticks have been suggested to represent, the above listed differences can be proposed to signal deeply rooted divergences. That is, the fields of bodily movements can be connected to particularities of both a structural and of a find-related nature. The field of bodily movements related to the *game of skittles* can accordingly be connected to the following qualities:

both clustered and spread out within a relatively large area – some finds found in streets – found in a locality rich in finds on the whole –mixed with other game-related types – found in connection with finds made of terracotta – found in an area with relatively large numbers of toys and figurines – possibly found in connection with balls in terracotta.

The field of bodily movements related to the *domino-/stick-resembling games* can in turn be connected to the following qualities:

clustered within a relatively small area – generally not found in streets – found in a locality poor in finds on the whole – not so mixed with other game-related types – found in connection with finds made of other materials than terracotta and pottery – found in an area with a relative abundance of seals – possibly found in connection with long dice and balls in stone.

In *relation* to the domino-/stick-resembling games, the game of skittles can be summarized with the key words *mixed*, *open* and *related to particular types of finds*. In *relation* to the game of skittles, the domino-/stick-resembling games can be summarized with the key words *secluded*, *closed* and *related to particular types of finds*. In this way, we get at contexts both in the form of spatial areas, as well as in the form of broadened game-related definitions that can include further, possible types of game-related objects. The fields of bodily movements which we talk about are thus to be found *within* these contexts, which between their points house symbolic, meaning-carrying functions. It is in these that we can trace the constructions of play which we are asking for.

c. The relation between finds and find contexts

The find contexts, in being contexts, can be said to be dictated by the partakers, created and manifested as historical moments. These find contexts must therefore, accordingly, be put together by the bodily 'ordering principles', which according to Bourdieu are both unconscious and systematic, and reachable with the dialectic link between the *objectified* and the *incorporated*. While with the terminology by Hall the emphasis was laid on the symbolic dimension, we land with this dialectic link in the space in-between the material and the symbolic. That is to say, when we translate the

'objectified' and the 'incorporated' to a in this connection suitable – if simplified – terminology, we come to concentrate on the link between the *individual* (the incorporated) and the *exterior* (the objectified). The link can be understood with the 'balancing' that occurs between oneself and the surroundings. The search for constructions of play must hence concern the *relationship* between the finds and their above established find contexts, or, in other words, the distinguishing of *repetitive patterns* versus *variations* versus *exceptions*. The reason for this is that repetitive patterns can be seen as the outcome of repetitive (regulating) bodily movements, while variations and exceptions in connection with these can be suggested to signal individuals' differing attitudes towards these movements.

We will accordingly return to the game-related types cones and casting sticks. Now, we will pay attention to their appearance in a number of areas ('North', 'Middle A', 'Middle B' and 'South'), as well as a number of localities within which they are found. Where it is possible, we will also observe aspects noted for the areas HR as well as DK-G. This we will do in order to study the finds in terms of repetitiveness/variations/exceptions (we keep to the idea of cones as utensils for games of skittles, and casting sticks as pieces for domino-/stick-resembling games) (the aspects are taken from the presentations and results of the previous chapter):

CONES

<u>Relative number:</u> the cones of the sub-type 'small cones with pointed tops'/'small cones' are mentioned as markedly frequently found. In DK-C, the cones constitute 21% of the total number of game-related types. The type forms the third largest group of game-related finds in this area. In HR, the cones constitute 37% of the total number of game-related types. The type forms the largest group of game-related objects in this area.

<u>Degree and appearance of density/dispersal:</u> cones in the area 'South' in DK-C show at a marked yet area-limited dispersal, and a partly single, partly clustered character. Within this area, some of the cones display a clustered character, others a single character. In HR, the cones display in contrast a marked dispersal, as well as numerically small-sized clusters.

<u>Degree of seclusion:</u> cones in DK-C are mostly found in the area 'South', the area where most of the other game-related types except for the casting sticks

are found. In HR, the cones can similarly be found at localities where other game-related types can be found.

<u>Closeness to streets:</u> the cones in DK-C that are clustered are found in a street, while the single finds of cones appear away from streets. In HR, cones have a noticeable connection to streets, at the same time as cones also appear away from streets.

<u>Degree and combination with other game-related types:</u> cones are in majority in the locality ‘bl 12 south-east’ in the area ‘South’ in DK-C. They are in overwhelming majority in the locality ‘bl 11-12str’ in ‘South’. Here, however, the only other game-related type consists of balls. A majority of cones can also be seen in particular localities in HR. In HR, a marked closeness between cones and balls can be noted for several locations.

<u>Appearance of non-game-related finds:</u> in the locality ’bl 12 south-east’ in the area ‘South’ in DK-C many objects in terracotta can be found. The locality is particularly rich in toys and figurines in terracotta. In a similar way, many items in terracotta can be found in the locality ’bl 11-12str’. This locality is also rich in toys and figurines in terracotta.

<u>Appearance of vertical aspects in the area ‘South’:</u> in the locality ’bl 12 south-east’ in ‘South’ in DK-C most of the cones belong to the interval 2-3 metres and thereafter the interval 1-2 metres. Other finds of cones in the area ’South’ have the same relations of depth intervals, with a few examples belonging to the depth interval 0-1 metres. The only exception is the locality ’bl 11-12 str’, where the majority of cones belong to the interval 3- metres.

Cones appear in relatively large numbers. At the same time, they display a somewhat different distribution in DK-C than in HR. Also within these areas, they are seen to be of a varied character in that some specimens stand forward as single finds while others are clustered. A varied impression is also following from the fact that they are partly found away from streets, partly found in connection to streets. They appear partly mixed, partly not mixed with other game-related types. They are found in connection to other finds in terracotta, particularly toys and figurines. Concerning the vertical aspects, cones in the area ‘South’ are mainly centred in the deeper intervals of 2-3 metres and 1-2 metres. A variation can be seen in that a group of cones is found within the depth interval 3- metres.

CASTING STICKS

Relative number: the casting sticks are mentioned as markedly frequently found. In DK-C, the casting sticks constitute 28% of the total number of game-related types. The type forms the largest group of game-related finds in this area. In HR, the casting sticks constitute 26% of the total number of game-related types. The type forms the second largest group of game-related types in this area.

Degree and appearance of density/dispersal: casting sticks in the area 'Middle A' in DK-C have a very limited spreadness and a markedly clustered character. This is also the case in the area 'North' and to a certain degree in the area 'Middle B'. A similar pattern can be seen in HR.

Degree of seclusion: casting sticks form the only game-related type that dominates in the areas 'North' and 'Middle A' in DK-C. This gives them a secluded character. A secluded character can also be seen in the area 'Middle B'. A secluded character is also noted in HR.

Closeness to streets: casting sticks are generally not found in connection to streets in DK-C. This is also the case in HR. A similar tendency can be seen in DK-G.

Degree and combination with other game-related types: casting sticks are in overwhelming majority in the locality 'bl 5-7-8' in the area 'Middle A'. Casting sticks are also in overwhelming majority in the locality 'bl 3-4' in the area 'North'. This seems also to be the case at the localities were they are found in HR.

Appearance of non-game-related finds: in the locality 'bl 5-7-8' in the area 'Middle A' in DK-C many finds in other materials than terracotta and pottery can be found. The locality is particularly rich in seals. In the locality 'bl 3-4' in the area 'North' many finds in other materials than terracotta can be found. The locality is particularly rich in copper objects.

Appearance of vertical aspects in the area 'Middle A': in the locality 'bl 5-7-8' casting sticks are to be found within the depth intervals 0-1 metres, 1-2 metres and 2-3 metres. Most of the casting sticks belong to the interval 0-1 metres.

Casting sticks appear in relatively large numbers. In both DK-C and HR, they have a coherent character in spatial distribution, generally found away from streets. Following from their common feature of markedly clustered appearance, they do not appear as integrated with

other game-related types. They are found together with finds in different kinds of materials except for terracotta and, to some extent, pottery. As to vertical aspects, they show at vertical continuity.

The survey can be summarized with a comprehensive picture of the cones as having a more varied character, while the casting sticks give a more coherent picture. In consequence, among the latter group, divergences that do appear stand out much more clearly than divergences among the cones. Divergences among the casting sticks can hence be termed exceptions, while in the group of cones they rather appear as variations. The two types of finds can be interpreted as signalling *differing attitudes* towards the fields of bodily movements that they have been assumed to represent. With a larger degree of variation in the spatial distribution and integration with other finds, 'cones as utensils for games of skittles' appear to be of a more *open* nature, while 'casting sticks as pieces for domino-/stick-resembling games' stand forward as more *closed*. If we however in light of this consider the degree of variation in shape and ornamentation, we see the opposite picture, in particular if we with 'cones' mean the sub-type 'small cones with pointed top'/'small cones'. We recall that this type of object has a limited degree of variation in both form and ornamentation. Casting sticks, on the other hand, display a marked degree of shapes and kinds of ornamentation. With this, the two types of objects can be suggested to point at different areas for *repetitive pattern* versus *spaces for variation*.

The differences in repetitiveness versus variation (as well as the differences in areas allowed for variation) can with this be seen as expressing differing degrees and spaces for 'bodily movement oscillations'. Following the terminology of Bourdieu, these become the places for the dialectics, which means that 'place' and 'movement' at this point join together into what we may term *moment*. By this, we have reached that practice through which we can avoid the 'model of beforehand' and get at the lived reality. Here, we also escape the problematic 'definitive abandonment' in favour of a more mobile and flexible abandonment of social kind, directed by such things as social conventions, or the typically sudden changes of places when playing games. The leaving behind of the more dispersed and spatially varying cones and the leaving behind of the spatially more coherent

casting sticks are hence to be taken as several leaving behinds. This repeated abandonment forms an integral part of the two suggested fields of bodily movements. In this way, the material remains become the traces of *moments of playing/leaving-practices*, which is to say that our sorting and coding has led us beyond the objects, towards more socially based constructions of play. Based on this, we can now, through the comparative stage of the work, try to frame the coded materials in order to distinguish worlds of play.

→ Construction of play completed

6.3.3. Comparison
Starting from Relation-worlds →/Signifying principles →

We have so far searched for constructions of play that are based in contexts, that is, that are anchored in the exterior, explicitly relational. Grounded in these more socially based constructions of play, our present aim is to search for further, repetitive features through comparisons of the coded materials. This we will do in order to lift forward what can be distinguished as frames or worlds of play. As we can anticipate, these should appear as integrated and fully acceptable parts in human social activities, which is to say that they should display both inward and outward concordance (in line with the undertaking of abduction).

Somewhat simplified, one could say that we have discussed three successive perspectives concerning the relational. With Fritz, we arrive at the idea that the game-related objects point at fields of bodily movements; with Hall, we argue that within these bodily movements meaning is created and re-created; with Bourdieu, we conclude that within this creation, every individual has his or her own relation between the inner self and the outer world to consider. Through these perspectives, we have distinguished 'places', which we principally can understand as the dialectics between the incorporated and the objectified (with the terminology by Bourdieu), or as moments that signal playing/leaving-practices of a here-and-now-character. From a Bourdieuan perspective, we reach with this a focus on the *production of*. This is the case since what we observe is not any complete sets of

rituals that are carried out in a mechanical way. Bourdieu speaks in this connection about ‘social strategies’, which are directed on the maximization of both material and symbolic profits. Examplifying with preferential marriage, he maintains that instead of viewing this as the result of obedience to a norm, this should rather be seen as a reproduction strategy (Bourdieu 1990:15ff). We attain with this a different kind of economy, an economy that spends much energy in concealing itself; and in which the seemingly illogical and contradictory can come forward as logic. This economy becomes totally intertwined with the *symbolic capital*, which is the same as an accumulation of prestige and honour (Bourdieu 1990:117f, 135ff). Through this, we distinguish a three-dimensional kind of economy, which concerns the *presence of the past in the present*. According to Bourdieu, the experiences of the past tend namely in a more reliable way than any kind of rules and norms to guarantee constancy over time. The present past, which reactivates itself in ”/.../similarly structured practices/.../” is thus the same as the principle of continuity, *as well as* of regulating transformations which do not follow either mechanical laws or subjective ‘choices’ (Bourdieu 1990:54).

In light of this noticeably temporally bound and administer*ing* symbolic capital, we first and foremost escape the simplified dichotomy between the economic and the non-economic (in other words, the dichotomy between what is ’serious’ and what is ’idle’). We furthermore reach an insight into what can be seen *both* as constancy over time *and* as continuous adjustments of here-and-now-character. With this angle, we may once again strive to approach the ‘moments of playing/leaving-practices’ which we arrived at above, this time seen from the perspective of symbolic capital and framed into worlds of play that function as social strategies.

a. Consistency of fields of bodily movements

Modulating the idea of orientation areas by Fritz into fields of bodily movements, we pinpointed, as above stated, rather *deep-going* differences between the different types of game-related objects cones and casting sticks. These differences could hence be taken to imply

‘consistencies’ or deep-going characters (over time). With this, ’fields of bodily movements’ would appear as both effective and conservative, whereby any changes in character would come to mirror things of particular significance. ‘Movement’ would in this connection come to work as immanent, un-questionable ways of life. Signs of this would for example be seen in the coherent features of the materials, such as the clusters commonly seen among the casting sticks, or the schematized types of ornamentation appearing in the cones. This would also be seen in their consistent ‘existence’; the fact that both cones and casting sticks can be found in the DK-C, the HR as well as the DK-G areas. Against this backdrop, we can at the same time point out spatial particularities, which following the deep-going character of the ‘fields of bodily movements’ may stand for significant differences or changes. This can for example be illustrated with the circumstance that a relatively larger number of casting sticks has been found in DK-C, while in HR a relatively larger amount of cones has appeared. We also have the fact that cones seem to ‘die away’ (that is, they are mostly found in the deeper depth intervals), while gamesmen in contrast are only found in the less deep depth intervals. Here, we may add the observation from the area of DK-G that cones and casting sticks found at deeper depths are of a more classical and a more varied appearance, respectively. Concerning the casting sticks, we may add the comment by Mackay noted previously that these seem to disappear in the Late Period (although this seems not to be supported by the finds analyzed in this study). While representing traditional, deeply rooted fields of bodily movements, these spatial particularities should be viewed upon as crucial. Advocating the perspective of fields of bodily movements, these particularities can accordingly hint both at principles of continuity, through which the social structure may constantly appear as ‘the same’; as well as at differences/changes of fundamental significance. In this connection, the vertical differences can be suggested to mirror something of the societal changes that occurred during the Post-urban/Late Harappan period, during which some kind of breakdown of civic order has been suggested (see e.g. Possehl 2002:243f; Wright 2010:309, 321ff).[194] The decline in cones of

[194] For more on this, see Chapter 2.

classical appearance or a possible disappearance of casting sticks can with this line of thought be seen as reflecting the overall disappearance of classical features during this period (e.g. Wright 2010:317).

b. Mode-related adjustments

In contrast to the above viewpoint and following Hall, since meaning is the result of social conventions and never can be finally fixed, *changes* and *adjustments* may appear repeatedly, and, so, become of special interest to search for within the above defined find contexts. Here, we can point at less clear examples from the above presentations of find contexts. One such example may be found in the circumstance that cones are found with items in terracotta, while casting sticks are found with objects of different kinds of materials except for terracotta and, to some extent, pottery. What we see could be manifestations of changeable values, grounded in what happens to be 'in fashion' at the time.

c. Feel for the game

When we put these two angles of approach together, we see that we find both more blurred as well as sharper differences in the spatial pattern. It may in light of the concept of symbolic capital be close to hand to think of the more clearly marked differences in the form of *social (vertical) differences and the maintaining of social affiliation*. This can be examplified with the above noted differences concerning the relative appearance of casting sticks and cones in the areas DK-C and HR. This difference may mirror social differences of some kind, like a difference in social groups. When considering the accentuation by Bourdieu on 'the forgotten past' and the administer*ing* of symbolic capital, we notice at the same time that what it is about are not traces of any elongated time but of the present time. From this perspective, the blurred differences previously discussed can at the same time be interpreted as signalling continuous adjustments of individuals between the objectified and the incorporated. Here, the relationship

between the forgotten past and the present time come to occupy a key role. With this view, the differences in material – terracotta and, to some extent, pottery versus other kinds of materials – need not in themselves be seen as signs of social differences. Rather, these material differences may be understood to be representing specific, on the surface changeable, significances or values, *between* and *with* which such adjustments are undertaken.

Bourdieu uses the term *feel for the game* to illustrate the meeting between the incorporated and the objectified. The term provides the 'game' with a subjective as well as an objective sense, as well as lends a feeling for the probable outcome of the game (Bourdieu 1990:66). In this context, we may be tempted to interpret the term literally. In view of the 'sense of outcome', and in light of the strong feature of gambling appearing in both domino games as well as the mentioned stick games, it is close at hand to suggest something similar for the casting sticks – whereby, in that case, the playing part and the owning part would become intertwined in line with the concept of symbolic capital. This could explain the noticeably regulated context noted for the casting sticks, as well as the number of them. From this point of view, we can furthermore understand the clustered and secluded character suggested for these objects. This could be signalling that different individuals had different access to the game.

Based on this reasoning, we begin to distinguish frameworks of play that are built up by an interlacing of the past and the present. The play- and game-related practices are played out both *in* time and *with* time. Stress is thereby laid on the moment of uncertainty/excitement; on the 'air of risk' that provides the possibility of mis-recognition. What we discern can be suggested as slices of moments of continuous adjustments, at the same time as we arrive at accumulated capital that "/.../produces history on the basis of history and so ensures the permanence in change that makes the individual agent a world within the world" (Bourdieu 1990:56). The frameworks that we by now distinguish can in other words appear thanks to the reaching of a *three-dimensional* context. Without the need for the idea of *a priori*, we moreover attain a more allowing attitude, within which the seemingly ambiguous receives a practical necessity. This may be illustrated with those spatial exceptions which do not 'fit in' in the

repetitive patterns, as well as with the previously suggested spaces for variation. The more blurred differences can in turn be taken to illustrate the ongoing creation and re-creation of social positions within the playing. That is, the traces of playing become *rational traces of social realities*, which oscillate between constancy and quick adjustments, but within which societal positions endure or seem to be enduring. To exemplify such enduring features, we may again point to the links seen between, on the one hand, casting sticks and finds in different kinds of materials and, on the other hand, cones and finds in terracotta. These can in this light express a kind of rigidity in the way that the game-related utensils are produced in the same material that is 'in fashion' at that moment. This can in turn reflect something of the uniformity or 'sameness' that has traditionally been accentuated for the Bronze Age Indus Valley, as well as for Mohenjo-daro specifically.[195] The vertical difference that is to be seen, namely that the spatial pattern seems to point at changes in the upper levels, may, as suggested above, mirror the changes on the whole that are put forward for the latest period of the settlement. In that case, a principle of 'sameness' could be suggested to be seen here as well. The game-related materials receive through this a significant role as contributor to insights of the social structure within which they appear. As 'signifying principles' they no longer appear as some irrational and secluded appendage. We can hence define frames for acceptable play practices, worlds of play that attain their place within the social context.

By use of the words by Hall, this has become possible firstly on grounds of our choice of focusing on 'meaning' rather than 'function'; and secondly thanks to the circumstance that this meaning is not inherent but relational, whereby it becomes possible to trace in such things as differences. This in turn shows how interwoven the role of the researcher is with the investigation. We can see that without this interwoven quality, we would not have gained access to that symbolic capital that can only rest on moments of uncertainty (on moments composed of the present).

Can we accordingly, on the basis of this line of thought,

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[195] For more on this, see Chapter 2.

distinguish those moods of play that these worlds of play would probably have comprised?

→ Frame of play completed

6.3.4. Conceptualisation
Starting from Signifying principles →

The purpose of this stage is to conceptualize the above suggested frames of play by a continued search for correspondences following the archaeological starting point Signifying principles. The conceptualisation concerns the distinguishing of what can be discerned as the presence and impact of moods of play. We know that such moods must not necessarily have been shared by all partakers of a specific 'world of play'. However, we also know that such must have existed; if not, we would hardly have found any traces of play- and gaming practices. Thus, in order to get at them, our first task must be to step *inside the frames*. That is, we must reach at the dialectics that go on inside them and upon which they are built. How, then, do we in more concrete terms undertake such a step? One way may be to analyze the built-up frameworks out of the process of encoding and decoding, since this constitutes such an interwoven aspect of our undertaking. That is, we may try to come close to what we as researchers are actually engaged in. Here, we may recall the previously described, three-headed model of the systems of representation.[196] From a more discursive point of view (Hall 2003/1997:41-61), we may describe this model in the following way: we have on the one hand the 'subjects' produced by the discourse (individuals that personify the discourse[197]). On the other hand, we have the fact that the discourse provides a place for the subject (the viewer, the spectator), from which the specific knowledge of the discourse appears most meaningful. The discourse thus constructs the position of the subject, which in turn according to Hall has ”/.../radical

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[196] See Chapter 4.

[197] Such as the 'criminal' becomes defined by the system of 'self control' of the modern society (Foucault 2003/1975).

implications for a theory of representation", as this subject similar to the firstly mentioned subject hence becomes 'subjected to' the rules and regulations of the discourse (Hall 2003/1997:56). I as a researcher thus observe the game-related materials out of the point of view of my discourse, out of the *Zeitgeist* from which I cannot escape. This represents however but *one* way of approaching this line of thought. We may as well choose to look at it from a much smaller perspective, whereby we can leave the 'large' world in favour of a much smaller one, inside or beyond the former. This small world is built up by a never stagnant power of attraction going on in and with the archaeological materials in question, towards which I as researcher become 'subjected to' as well. It is about a power that endlessly oscillates between three never 'completed' points. As we recall, these consist of *my* process of encoding and decoding in dialogue with the materials, between and with which there is at the same time *another* process of encoding and decoding going on from *two* directions. This is the case since I, as a researcher, am not 'staring at a stone'. Rather, I engage myself with ongoing, social (read: relational) contexts. The work of representation can in other words be said to occur out of *three* interwoven directions, which form the foundation of, and condition, a small, independently working world.

Now, when analyzing our frameworks of play out of this perspective, we stumble on something unexpected – we discern that our frames seem *not* to be built up by such a tripartitely working world. The process of encoding and decoding with which we have engaged ourselves has in our Bourdieuan line of thought above all concerned the incorporated and the objectified – which, in our translation, has become the relation between the individual of the past and the exterior context. Can 'the individual of the past' and 'the exterior context' then really constitute equivalent points, between which any dialectics can be discerned? Let us go back to scrutinize our undertakings in more detail.

<u>Untenable frames of play?</u> With the term 'feel for the game', we managed to frame the phenomenon of play by sanction its place in the social reality. However, when we attempt to step *inside* this framework, that is, when aiming at discerning (playful) processes of encoding and decoding within this, we face difficulties. With the

expression 'feel for the game' we firstly reach at a uniform behaviour that must with necessity be bent on profit and maximization. Thus, internal struggle and 'sense of outcome' is the only thing that binds the partakers together. Secondly, and with this, we have to halt in the individual; described as 'a world within the world', the partakers of the frame stand forward as sovereignly acting individuals without possibilities or needs of any relationships. Hence, we cannot with this distinguish any equivalent points between which 'true' dialectics can come forward. With this, the frames of play become based on the encroachment of the world around, whereby they end up simply mirroring features of the surrounding, societal structure. The 'relation' that was being searched for becomes with this nothing but a negotiation with the surrounding world. What looked like exterior and interior concordance turns out in practice to be a one-way direction, going from the outside and inwards. How, then, have we managed to reach such a problematic point?

Untenable constructions of play? When looking more closely, it turns out that the suggested fields of bodily movements concern movements that are, on the one hand, found with the individuals, on the other hand linked outwards to deeply rooted, deterministic conditions. The field termed for example 'thought processes' describes in this way only an outer form – while what happens inside these, within the form and between the partakers, is being left out. The constructions of play become with this way of thinking on the one hand outwardly based. However, on the other hand, instead of being grounded in play practices, they lay the foundation for the encroachment of the world around.

Untenable here-and-now? With an accumulated past as a starting point and a sense of outcome as an eye-catcher, the 'momentary slices' which we have been studying seem to attain a rational as well as a deterministic direction towards *the time that is to come*. This could be taken to question both the suggested character of here-and-now, and the thought about the future as an area of possibilities. We could moreover take a critical stand towards the idea of 'repeated abandonment'. Despite the avoidance of the definitive abandonment, we seem with this angle of approach nevertheless to follow a uniform scheme of abandonment. We follow a plan where every stage with

necessity is defined by and followed by yet another abandonment. What we lack is a present with an onward-directed movement; a *beginning*. We are able to trace a past and a present; the objects are being used and are temporarily abandoned – but when and where do they become picked up again?

<u>Untenable view of play?</u> The term 'sense of outcome' provides a melting together of playing and owning, the latter of which constituted a problematic feature of the former level. However, the term fits ill with the other focus of that level, the one of play as an idle pastime activity. While we within this way of thinking have focused on the rightful place of play, its essentiality as a social ritual, that standpoint seems to have been reduced to secondary importance. Instead, our reasoning has lead to such things as unwritten norms and conducts, where we seem to have mixed up a (negatively loaded) *moment of uncertainty* with the (positively loaded) *moment of excitement*. We have in other words reached a position from which we can only look at play and gaming 'from the outside', gaining nothing but the 'official' or visible view of these phenomena, to make use of the terminology of Lönnqvist (1992:366ff). Again, then, we cannot with this reasoning gain access to the dialectics, or the process of encoding and decoding, since this is taking place on the inside.

Similar to the former level, we can so far note that our separate stages of work have been made to fall by the preceding stage, following a kind of domino effect. While we have let the phenomenon of play follow along hierarchical lines, we have, once again, lost sight of it.

– search session interrupted –

The above points create the following main questions: (1) how can we proceed from a prevailing present that is based on the past, towards one that precedes a future? (2) How can we attain an interior and exterior concordance that is not based on the encroachment of the world around? (3) How can we create a frame that within itself allows space for different moods (of play)? That is, how can we arrive at a frame that allows us to step inside to view the 'unofficial' dialectics?

In this connection, we may look more closely at some of the above listed, 'critical points':

- *Repeated abandonment*: the objects were supposed to be involved in overlapping playing/leaving-practices. The latter could comprise everything from the occasional 'putting aside on the shelf' to the definitive abandonment, and it was closely connected to the changeable character of play. This provided the term abandonment with a more loosened up character. However, the term remained an irrevocable fact so that on grounds of its presence it prevented an onward-directed movement, a future. *Reflection*: Would it be possible to follow the opposite direction and narrow down the perspective by not at all asking for what 'has happened', but solely for what 'is going on'?

- *Constructions of play based on fields of bodily movements*: the objects were suggested to constitute parts of different kinds of games that were analyzed in light of different fields of bodily movements. With this, the constructions of play came out of the interior of the individual and could be connected to outer, socially based contexts. However, through the emphasis on bodily movement, they kept remaining with the individual. *Reflection*: would it be possible to turn the focus in the opposite direction while studying in more detail the movement-accentuated contexts in themselves?

- *Frames of play based on 'feel for the game'*: the playing could be sanctioned and framed as a social ritual via the term 'feel for the game'. In this way, the objects could receive a more partaking role in the creation and re-creation of social positions. However, this presupposed a uniform intention among the partakers as well as a struggle between individuals, rather than a playful mood. The sanctioning was moreover based on the encroachment of the surrounding exterior. *Reflection*: would it be possible to avoid searching for what the frames are framing, in favour of a more thorough attempt to define and differentiate the frames themselves?

As we can see, all three points concern forms of what we may call condensation. On the basis of these condensations, the border between the exterior and the interior may become easier to define, by which it may become possible to step *inside*. How, then, can we in a more concrete way reach at such defining, as well as avoid the encroachment of the exterior? This will form the task of the next level.

6.4. Finding playfulness in game-related worlds: generating theory (Level 3)

The framework of play that was built up in the previous level demanded with necessity uniform ambitions among the partakers. It furthermore rested on an interior and exterior concordance that was based on the encroachment of the world around. The first of these two points can be said to represent what Simmel (e.g. 1992/1908a) accentuates as a common problem; namely a confusion of what constitutes *form* and what makes up *content*, analytically separated from form. According to Simmel, this confusion shows us how we, without knowing it, still focus on the individual's interior, placed opposite an imagined exterior. The second point can in turn be seen as a confusion of *logical types*, to make use of the terminology of Bateson (2002/1979).[198] The aim of this level is to find a way to step *inside* the built-up frameworks of play to reach at the presence and impact of moods of play. This will be worked towards by a more thorough scrutinizing of the border between the interior and the exterior, as well as by a concern for the avoidance of the encroachment of the surrounding world. The undertaking will therefore be based on an analytical disentanglement of the suggested confusions by using the ideas of Simmel and Bateson.

<u>Form and content</u>: According to Simmel, sociology must reject all forms of realism since knowledge is always translations of 'immediate givens' to a new language. Knowledge can consequently never become a reflection of reality such as is stated by realism. Rather, it

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[198] The term is borrowed from Russell (Bateson 2002/1979:108).

becomes a second-hand construction (Simmel 1992/1908a:25). Following this, science can be said to rest not on simple facts but on interpretations (*Deutung*) and forming (*Formung*), according to categories and rules that build upon the a priori instruments of the science in question. In line with this, society does not exist as an autonomous existence, but is made up from *forms* and *content*.[199] A key word in this connection is *sociation* (*Vergesellschaftung*), which according to Simmel can be understood as the continuous creation and re-creation of society, a continuous course of events (Simmel 1992/1908a:19f, 1992/1908b:53ff; Watier 2008:94f). In order to reach those elements within society that are 'purely societal', procedures of abstraction have to be undertaken. This is the same as the separation of form (the forms within which the individuals socialize in order to reach their goals) from content (which concerns such things as interests or instincts; the material of the sociation) through the *method of form*. The contents are not social by themselves but are found *in* the individuals. They can only become social through forms of reciprocal action, through which the individuals influence each other. The forms in their turn are developed out of fundamental psychic functions and are to be seen as *relative* concepts. What can be distinguished from above as form, can from below appear as content. The advantage of this analytical division is that it illuminates that different contents can become socialized within one and the same form; and in reverse, that one and the same content can lead to very diverse forms of sociation/reciprocal action. Reciprocal action is the same as the realization of a unit, of a sociation, and with this, the realization of society as a whole (Simmel 1992/1908a:17ff, 25; Watier 2008:95f). This has the consequence that we benefit more from analyzing processes of sociation than from talking about society as a whole. As was previously discussed in this work, this also leads to that even the smallest relation between humans becomes of significance (Simmel 1992/1908a:23f, 33; Watier 2008:97ff). In this context, the term 'social

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[199] The reasoning by Simmel concerning the distinction between form and content was previously touched upon in connection with the formulation of the second and third archaeological starting points (see Chapter 4). In order to suit the discussion of this chapter better, this distinction will here be approached and used from a somewhat different angle.

liaison' is of importance. This is according to Simmel an elastic concept, since somebody can both have liaisons and be someone's liaison. Sociology following Simmel, can accordingly be summarized as the studying of the forms that realize when individuals influence each other reciprocally through interaction (Simmel 1992/1908a:33; Watier 2008:96f).

At this point, and out of this perspective, we can suggest that the in the previous level utilized term relation was understood from below. That is, we can now see that we in the previous level were solely concerned with content. We discussed what is found *in* or *with* the individuals, while such things that could be included in sociation were missing. With this detection, we distinguish that the key word condensation that was used at the end of the previous level rather than referring to a distinction between what is interior and what is exterior concerns a search for *forms for events*, whereby it becomes important to already from the beginning work towards keeping form and content separated (in this way, we can at the same time ignore the problematic 'exterior' in our reasoning). The advantage, following Simmel, is that a multiplicity of contents can become possible to be included within one and the same game-related form. What we hence could do in more tangible words is to try to focus on larger contexts by a survey from above. The question concerns:

- How can game-related forms be distinguished in the repetitive pattern?

<u>Self-correcting systems and logical typing</u>: A somewhat differently formulated focus on relations can be found in the emphasis on *self-correcting systems* and *logical typing* by Bateson (2002/1979). Criticizing what he sees as the atomizing approach of the Western way of thinking, he lifts forward a relation-based epistemology in which both human society and nature consist of *open* – adaptable, flexible and at the same time suitably self-correcting – *systems* (Holmqvist 1995/1979).[200] The systems can multiply into endless connections,

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[200] The simplest example of the last mentioned quality, the self-correction, is the thermostat that continuously swings between the actual and the desired condition by

something that we however, with our Western habit of splitting things into static and isolated divisions, tend to ignore. Instead of a world made up of 'things', Bateson, according to Holmqvist, thus sees an abundance of complex networks within which 'everything' becomes connected. There exist no closed unities, no absolute boundaries. The world consists of substance and form, in which the latter, that is, the organization of matter, constitutes the main concern (Holmqvist 1995/1979). In connection with this, the emphasis by Bateson on *logical types* and the essentiality of keeping these separated becomes of interest. Logical types refer to the importance of keeping the things that occur *in* contexts (individual actions) separated from the *organization* or *defining* of contexts (ways of organizing actions, or composite actions). From a communication theoretical point of view, Bateson expresses this in the way that there is always a partly predictable and therefore rather regular, but quite complex relation occurring between the message in itself and its meaning (Bateson 2002/1979:106f).[201] When A utters a sound, B can gain information about the state of A, which is of importance for the existence of B. But in order to handle the signs which A expresses, B must according to Bateson be aware of the meaning of the signs. The point here, besides messages concerning the simple coding, is another class or another *logical type* of messages, a more subtle information that can inform B about how messages are to be coded (called meta messages). The reason for this is that codes are condition-bound, through which the content in different actions can be changed depending on the context;

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means of feedback and as a result is capable of directing its own behavior (Holmqvist 1995/1979:318).

[201] The communication theoretical angle of approach rests according to Nørretranders on the linguistic paradox 'I lie', as well as the attempt by Russell and Whitehead to banish this problem through rules for logical types in the work *Principia mathematica*. In contrast to Russell and Whitehead, however, the paradox became for Bateson a starting point for the study of why one cannot understand the words of the everyday language literally, but must know about the context in order to understand them. This can also be expressed in the way that a lot of information has to be eliminated before one can become conscious of it. With this follows that the consciousness needs to be anchored in what eliminates, that is, the body. Here, an emphasis on the body language can be seen and the significance of this as a transmitter of messages concerning relations, which, while constituting this ex-formation, becomes more important than the information (Nørretranders 2006/1991:200ff).

the changeable relation between A and B (Bateson 2002/1979:106f). As Bateson maintains, the human being understands and is capable of separating between these signals on a meta-level. She does this by constantly checking and correcting hypotheses that she makes. Communication thus turns into a range of contexts of learning and correction "/…/as to the nature of each previous context" (Bateson 2002/1979:110). Of significance here is thus the presence of *levels* of different kind (Bateson 2002/1979:107), and the understanding of the different meanings of these.

Also in the reasoning of Bateson, we distinguish a deepened problematizing of the term relation. We can see that this concept in the previous level was regarded as a connecting link, rather than a *context in itself*. With the emphasis on self-correcting and interconnected contexts or systems, we realize that the key word condensation is about the distinguishing of self-working systems. Starting from these kinds of systems, we should once again be able to avoid a problematic search for boundaries between the interior and the exterior. Rather, we can start out from the presence of these systems while discerning them in terms of logical typing (that is, we can once again ignore the problematic 'exterior' in our discussion). In more concrete words, that means to separate higher situated contexts (ways of organizing actions) from lower situated contexts (individual actions). The question concerns:

- How can organizations of game-related actions be separated in the repetitive pattern?

6.4.1. Collection of data
Starting from The moment of being left behind →

Here, we start with the first two areas of problems that were listed at the end of the previous level and let them form a foundation for our further reasoning. That is, how can we avoid the term abandonment when looking into archaeological materials? How can we reach before the actual leaving behind? And how can we thereafter proceed from the idea of fields of bodily movements in order to embrace more than one individual – as well as interplaying individuals – within the

suggested games? Building on this foundation, we can thereafter present the above mentioned method of form advocated by Simmel as a theoretically viable way to reach more all-embracing constructions of play. We may also describe a way of separating different logical types in line with the ideas of Bateson in order to arrive at more all-embracing constructions of play.

a. Events: the moment of being left behind

Seymour and Schiffer (1987) maintain that the distinction of archaeological materials into different refuse groups can provide a useful help in the discerning of activity areas. As was discussed in level one, the adoption of this way of thinking had the consequence that the finds in question were seen as already taken out (separated) from underlying patterns of action. However, we can use this idea in a somewhat different way, in which we rather than trying to distinguish true activity areas can 'delineate areas' in order to detect repetitive patterns. This can be more clearly illustrated by adding the ideas behind the Harris Matrix by Harris (1989/1979). The so-called Harris Matrix was created for the study of archaeological stratification, or the observation of sequential and chronological relationships of strata and feature interfaces.[202] This can be formulated as the study of interfacial characteristics, or the structural arrangements of non-historical units, whereby the latter are provided with a historical direction. The physical relationships can be said to become translated into abstract sequential relationships, following three distinguishable relationships between units (Harris 1989/1979:34ff, 111ff, 155). As was previously mentioned, we have no possibility concerning the game-related materials from DK-C to distinguish layers of floors such as advocated by Seymour and Schiffer. Nor can we use Harris' stratigraphic units. What we can do, however, is to let these two approaches strengthen each other. In line with Seymour and Schiffer, we can discern repetitive patterns from a

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[202] The Harris Matrix consists concretely speaking of a sheet of paper on which a grid made up of rectangular boxes can be seen. For more on the practical use of this during excavation, see Harris 1989/1979:34ff.

horizontal perspective. This in turn can be used to reinforce the presence of sequential aspects. Simultaneously and following the model presented by Harris, we can discern repetitive patterns in depth intervals. In turn, this can be used to strengthen the idea that the materials, in accordance with the ideas by Seymour and Schiffer, do not seem to be lost or thrown away as waste. These horizontal and vertical, mutual reinforcements can thereafter, on grounds of their repetitiveness, be seen as events. This leads to a focus on larger, abstract patterns in the materials, rather than on the actual leaving behind of it. Such a starting point becomes a platform for the courses of events that we are aiming at – that is, moments of here-and-now character that are able to include a future. The game-related finds do thus not constitute remains *of* something, but become the material prerequisites for something that *can be made possible*. The sub-heading 'The moment of being left behind' holds with this perspective a more subordinate position than in the previous levels.

b. Powers of attraction: theoretical starting point no. 1

An alternative division of games according to Fritz (2004) consists of focusing on what kinds of powers of attraction a specific game is in possession of. Fritz starts from the idea of central interests by Caillois, which, as we recall, concern sources of attraction that motivate the player to let him- or herself be pulled into specific games. In this context, however, Fritz maintains that there are a much larger number of powers of attraction than the four ones presented by Caillois. He distinguishes 11 such powers, which we can translate into 'fighting'; 'taking risks'; entrusting oneself to luck'; 'entertaining'; 'being in ecstasy'; 'meditating'; 'collecting'; 'transforming'; 'enjoying'; 'creating'; and 'solving problems'. Following Fritz, it is important to note that a specific construction of play usually consists of combinations of powers of attraction, which characterize it to different degrees. In this way, specific constructions of play constitute different motivations for different individuals (Fritz 2004:44ff). The perspective can thus invite all partakers. Irrespective of their motivations, the partakers gather within the specific construction of play, within which they may take on different roles, ranging from active participants to

spectators. With this line of thought, it should hence become possible to suggest constructions of play that can comprise more – and more socially based – aspects than just concrete, bodily movements. By use of this idea, we should therefore once again be able to concentrate our search on larger, abstract patterns in the materials.

c. The method of form: theoretical starting point no. 2

The method of form by Simmel can be said to take its starting point in the presence of flexible dispositions (tendencies, inclinations and such), which have the capability to be an integral part of different forms of sociation and thereby can proceed from being content to constitute form. One such example is according to Simmel 'hunger', which goes from being a content that needs to be satisfied to become a form within the configuration of the 'meal'. That is to say, 'hunger' slides into the background while those *reciprocal links* that are formed between the partakers of the meal come to the forefront (Simmel 1992/1908a:17ff, 24). As was mentioned above, the method of form is about abstraction. Certain properties of a phenomenon or an object are disregarded while one or a few qualities that repeat themselves are observed and fixated upon. Here, the key word *distance* may be used as a suitable tool. This is because the nature of the forms, following Simmel, can be said to be a result of a relative distance between individuals, as well as between individuals and objects (Simmel 1992/1908a:18ff, 26f). We cannot know exactly what kinds of dispositions we could sort out as form-shaping in our studied materials. In this connection, however, Fritz' different powers of attraction, both universal and more all-embracing, could be helpful in defining *patterns* rather than searching for exact definitions. With the use of these powers of attraction, we can focus both on more fundamental, as well as on more positively loaded, play-related forms. The same goes for the tool 'distance', which naturally can be interpreted in different ways. Considering the relational aspect in searching for forms, distance may in this context represent the degree and nature of deviation, inwards as well as outwards and with the aim of isolating repetitive features. In this way, we may attempt to distinguish game-related forms in the materials.

d. The distinction of logical types: theoretical starting point no. 3

As Bateson accentuates, it is a common feature within research to confuse logical types. This gives consequences for how the results of analyses will be interpreted. As mentioned, there are according to Bateson on the one hand actions *in* contexts (simple actions); on the other hand actions that *define* contexts (ways of organizing simple actions, or composite actions) (Bateson 2002/1979:107). The latter include such terms as 'exploration', 'crime', and 'play'. Phenomena such as these are commonly erroneously treated as simple actions despite the fact that these rather belong to the composite type, thus describing ways of organizing actions. The significance of this confusion becomes according to Bateson clear in the example 'crime'. Following from our thinking that this constitutes a simple action, we make the mistake to think that punishment can obliterate or change this. As Bateson maintains, simple actions can easily be changed, but ways of organizing actions are in contrast much more difficult to change. When these hint at changes, they can almost be compared to paradigmatic shifts (Bateson 2002/1979:112ff). Play is in the same way a "/…/name for contexts in which the constituent acts have a different sort of relevance and organization from that which they would have had in non-play" (Bateson 2002/1979:116). In order to separate these logical types, it is advisable to make use of *context* as a suitable tool. With this, Bateson alludes to the *reinforcement system* that simple actions seem to respond to according to the rules of operant conditioning. Ways of organizing simple actions (such as play) – which represents a higher type – do not in contrast respond to reinforcements (Bateson 2002/1979:112ff). If we can distinguish such kinds of reinforcements in the materials, this can accordingly guide us in the separation between simple and composite dimensions. How, then, can we discern these? We can as a suggestion see the effect of them in *differences within* each game-related type, respectively. Such differences could namely be interpreted as variations, or the result of responses to reinforcements, while *similarities within* each game-related type in contrast can be thought of as standing for a higher degree of constancy. Based on the idea of the different powers of attraction, the differences and similarities can be interpreted in terms of larger *patterns*, again with a pronounced focus on the positively

loaded play. In this way, we can sort out what can be seen as organizations of game-related actions in the materials.

e. Cones and casting sticks: materials to be used

Here, cones and casting sticks will be in focal point, suggested as belonging to the game of skittles and the domino-/stick-resembling games, respectively. The narrowed approach is chosen in order to clearly illustrate the alternative viewpoints of this level.

So far, we have collected lines of thought ranging from ideas as to the subject of being left behind to theories that, based in the powers of attraction of play, concern the distinguishing of forms as well as the separation between simple and composite actions. With these Starting unities at hand, we may proceed to the stage of sorting and coding with the aim of illuminating tenable constructions of play.

→ Starting unities completed

6.4.2. Coding
Starting from Relation-worlds →

In accordance with the second archaeological starting point, that of Relation-worlds, we will focus on repetitive details that can be sorted and coded according to what can be seen as constructions of play. This we will do in two different ways.

a. Casting sticks as form

Casting sticks will here be used in order to illustrate the method of form according to Simmel. As we recall, these objects have been suggested to represent pieces for domino-/stick-resembling games. Concentrating on those casting sticks that are found in the area 'Middle A' in DK-C, we note that they appear notably clustered – that is to say, the distances are short between the objects within the group. They are at the same time found markedly far away from the majority

of other game-related types – here, we note a significantly longer distance. They are found in relatively large numbers in an area that on the whole is relatively poor in finds – which is to say that we once again come across a certain distance. They do furthermore not appear in connection with streets – here, we may suggest a longer distance to be seen as well (towards what we may call the public sphere). What kinds of reciprocal actions could these circumstances thus invite to? We may begin by interpreting the different distances. Since the objects in question appear distinctly clustered, they can be proposed to indicate a *closeness* between the partakers. As they are found away from streets, they may invite to *tranquillity*. Since they in different ways can be said to be secluded in relation to other types of (game-related) finds, they may moreover display a *seclusion* from other activities. If we consider descriptions of domino- and stick-games, we can among other things see that they in several cases constitute mathematical challenges. As to the stick games, for example, the person with a 'quick eye' and with the ability of counting fast will succeed in the game (Culin 1992/1907b:231, 243; Grunfeld, et al. 1978:108). Furthermore, we note that the domino pieces traditionally are to be laid down with a deliberately clicking sound (Grunfeld, et al. 1978:109), while, among the stick games, we find several examples which include specific words or songs accompanying the game. In some cases it is the partakers who sing. In others, the spectators sing and create a specific rhythm for the game. Besides singing, mimicry is sometimes included in order to divert or unmask the opponents. Sometimes, great numbers of spectators – in some instances the whole village – gather to engage in the game, which may last several hours (Culin 1992/1907b). In light of these descriptions, the clustered and secluded character may firstly imply the power of attraction termed by Fritz as 'problem-solving'. The game put the ability of counting and learning by heart to test, both among the players as well as the spectators. This, then, would in turn probably require some kind of tranquillity. The same character of clustered distribution and seclusion can be proposed as connected to the powers of attraction 'fighting' and 'taking risks'. That is, the spatial character may reflect the demands of these powers of attraction as to specific rules concerning the position of the players and the spectators. The game cannot be acted out 'just anywhere'. The seclusion as well as the

relatively large number of casting sticks can furthermore point to the power of attraction ‘entertaining’. The game includes in an engaging way both players and spectators/singers. It turns into something to look forward to, forming an exciting show that takes place in a for that purpose specifically chosen locality. The casting sticks as pieces for domino-/stick-resembling games can hence be lifted forward as a game-related form based on engaging key-words such as ’entertainment’, ’song and rhythm’ and ’mathematical challenges’. We reach a construction of play in the shape of a specific form, based on degrees of distance.

b. Cones as traces of simple/composite actions

In order to make the difference in type clear between simple and composite actions following Bateson, we may turn to the cones. As a ‘difference within’ this type, we can point at the circumstance that cones are found to be confined to one, single area in DK-C, while they are found within many more areas in HR. As a ‘similarity within’ the same type, we can in contrast note the fact that cones are found in connection to streets in both DK-C and HR. From the perspective of simple/composite actions, the difference can be seen as the result of a simple action since it appears as a single phenomenon. That is, it can be interpreted as an answer to, or an adjustment towards a specific circumstance. As to the phenomenon ‘found in connection to streets’, this may in contrast, and due to its repetitiveness, tell us something about the nature of the game at work. Considering the game of skittles, this repetitive feature could be linked to the demands of such powers of attraction as ‘entertaining’ and ‘fighting’. With this view, the feature ‘found in connection to streets’ deepens in significance and vanquishes the simple action (the difference), that can be said to diminish in significance. We arrive at a construction of play that comes forward as a way of organizing actions, which is to say that we reach a construction out of reach of reinforcements.

While we with Simmel’s method of form distinguish things in the materials, we are concerning the division into logical types following Bateson, separating the materials. In the first instance, we distinguish

regularities. In the second, we separate between differences and similarities. In the first instance, we attain a space within which things can take place. In the second instance, we lift forward general features. In two different ways, we have hence reached at more all-embracing constructions of play. We may now proceed to the working stage Comparison, in order to frame the materials into worlds of play.

→ Construction of play completed

6.4.3. Comparison
Starting from Relation-worlds →/Signifying principles →

Starting from more all-embracing constructions of play, the aim of this stage is to continue searching for and connecting repetitive features in order to discern possible frameworks of play. Following the undertaking of abduction, what we will have in view will be the obtaining of inward and outward concordance.

a. Forms of sociation

As we recall, according to Simmel, no relation becomes too small or too insignificant to be studied. This follows from the thought that sociation constitutes the continuous creation of society. With this angle of approach, it is those seemingly insignificant micro-forms that come into focus. It is through these that society becomes society, and through these that society receives its elasticity. Forms of sociation are thus the same as society in progress, which in turn justifies a micro focus (Simmel 1992/1908a:23f, 32ff). As Simmel asserts, at this point, the possibility exists to study the different ways in which groups of people create social unities and successively "/.../become more 'society' than [the groups] were before" (Simmel 1992/1908a:24, *my translation*). Sociation thus comes about through the emphasis on gradual development of the group in question of different forms of consolidation. These can look different within different forms of sociations, whereby different degrees of concordances are created between individuals. The degree of consciousness among the

individuals of the form in question also varies. Sometimes, the form is forgotten through the engagement in the very content. Sometimes, and in particular when groups formed in wider circles are concerned, the boundaries are strengthened and the consciousness about these increases. In most cases though, sociation is based on implicit knowledge. On the basis of this, it is however according to Simmel possible to differentiate different forms of sociation out of different degrees of consciousness concerning the formal, reciprocal ties. The more one is conscious about these, the more attention is laid on the ties (Simmel 1992/1908b:50; Watier 2008:98).

The question now is whether it from this perspective would be possible to proceed from constructions of play to the distinguishing of micro-forms of the formation of groups or worlds of play 'in progress'. Such distinction could be based on the existent degree of consciousness, if we again make use of our interpretation of distance in terms of deviation. That is, the more clearly seen deviation – or, the more apparent the properties of distance – the higher degree of consciousness of the form, and the more clearly distinguishable as a world for us present-day observers. Here, we may return to the casting sticks and the distances that we were able to discern for the specimens found in the area 'Middle A'. If we concentrate on the first distance, the fact that the objects appear distinctly clustered, we note that this pattern is repeated both within DK-C (in the area 'North'), as well as in a number of places in HR. We also observe that they appear in relatively large clusters both within DK-C (in 'North'), as well as in HR. Lastly, we have the spatial deviation from the majority of objects of other game-related types that repeats itself within DK-C (in 'North'), as well as in HR. How, then, can we know that this pattern is an expression of consciousness, and not an unconscious consequence of playing? One way to answer could be with the fundamental point of departure from which Simmel bases his reasoning. He puts great emphasis to the role played by psychosocial driving forces within forms of sociation, such as loyalty, devotion, confidence and belief in human nature. Without these, as he asserts, social relations would not become possible. With this angle of approach, we as researchers come close to everyday life, within which we reach both the dense net of reciprocal obligations as well as the significance of specific dispositions, which make society possible. In other words, we attain

that point *without* needing to talk about or count on norms and rules. This is the case since individuals interact with each other according to specific dispositions, permeating their relations with such things as goodwill and confidence. This underlines a presence of 'ordering structures', which do not have to be based on compelling sets of rules and regulations, but on a fundamental confidence in the human being. In turn this opens up for a more fundamental presence of consciousness. With the emphasis on micro relations, space is furthermore provided for the individual's personal (specific) development and fulfilment. This can, but must not, coincide with the developments of the other individual(s) within the relation in question. That is to say, we are able to see 'forms' within which the content need not be concordant (Simmel 1992/1908a:17f, 40, 1992/1908b:59; Watier 2008:98f). The patterns interpreted as expressions of consciousness can as a result of this include *both* what we may call social rules and regulations (such as the creation and maintaining of status) *and* moods of play. As we recall, one way of characterizing play is to describe it as consisting of intervals of melting together, within which the self-consciousness, the I, can be said to become abolished while one experiences flow. These intervals interrupt the reality but last only a short time, after which the I and reality returns (Csikszentmihalyi & Bennett 1971:45ff).[203] This makes it clear that the 'content' within one and the same individual need not be constant either. Rather, we are able to discern a constant oscillating between consciousness and flow. We can accordingly presuppose that this consciousness *has to be present* in the materials.

b. Play in itself as form

The pattern described for the casting sticks can hence be seen as a functioning order in itself, whereby it becomes possible to raise questions concerning for example movement patterns or house utilization. At this point, we discern that our task may not primarily concern the distinguishing of play and game-related form*s*. Instead,

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[203] This was briefly touched upon in Chapter 2.

the play and gaming can come forward as a specific form *in itself*. With this view, we see that we obtain an interior and exterior concordance that has validation *inside* the form of play. The pattern shown above has been based on deviations or distances *within* the group of casting sticks, not between these and other, outer situated phenomena – whereby we avoid what we previously termed encroachment of these phenomena. The concordance comes at this point forward as an own, small world or rather worlds, horizontally and vertically marked out and appearing as *repetitive unities* for sociation. They form with this view clearly visible frame-works, sharply separated from the contents, which we therefore can save for a closer look in the next stage of work.

c. Systems of double descriptions

As already discussed, the meaning of an action is according to Bateson dependent on the context, which highlights the importance of logical typing. If play appears illogical, this rather depends on the spectator confusing the logical type (Bateson 2002/1979:115f). Therefore, in order not to subdue what is illogical to make it fit in, an analytical awareness of which logical type one is referring to becomes relevant. Such things as social rules and regulations and moods of play form integral parts of the same context, in turn directed by the specific regulations of play. The above mentioned oscillation of play, whereby the I melt together with the action in repeated intervals, can be seen in a somewhat different light in this connection. Both the state of flow and the state of consciousness can at this point be said to form components within *one and the same context* or *system*. The very oscillation between these points appears as a key, a mutual communication concerning the actual and desired state of things. How, then, can we reach these contexts analytically? Following the line of thought of Bateson, we realize that they cannot appear or be described as something internal, but rather as "/.../a matter of the external relationship between two creatures" (Bateson 2002/1979:124). Thus emphasizing the relation, this becomes with this view the product of a double description. In consequence, the common use of characterizing adjectives such as 'pride' becomes incorrect. At stake is

not what occurs within a person, but what comes about between persons or groups. That is to say, focus becomes directed on what Bateson terms the *inter-individual* field. If we want to talk about 'pride', we must concentrate on two persons or two groups and their interaction. Such things as characterizing adjectives must in other words be *expanded* or *reduced*. This must be done in order to derive these from patterns of interplay, or, said in other words, from "/.../combinations of double description" (Bateson 2002/1979:124f).

With this, we avoid to define the game-related objects as something once and for all given, something that *is*. By focusing on what we can distinguish as patterns of co-operation, we can instead suggest them as material signs for double descriptions or relations. As an illustrative example, we may return to the cones in DK-C and consider the difference seen in their vertical appearance. Most of the cones are found in the deeper depth intervals 3- metres, 2-3 metres and 1-2 metres, while distinctly few of them appear within the less deep depth interval 0-1 metres. Contrary to this we find a greater number of gamesmen in this latter level. We find a similar trend within DK-G, where somewhat more cones are found at deeper levels, as well as being more classical in appearance. Gamesmen however occur in greater numbers in the upper levels. In our previous discussion (in level two), vertical differences such as these were taken to mirror something of the significant societal changes that occurred during the Post-urban/Late Harappan period. However, rather than halting at viewing the reduced appearance of cones as a reflection or a result of the societal changes, this can instead, together with the increased appearance of gamesmen, be seen as a *change*, that perhaps occured *in relation* to the societal change. With this perspective, we are here – above all – talking about something that within its changeability *subsists*, during and throughout what may have constituted great societal upheavals. The example can be said to form a pattern of interplay, which we find through a double description – the relationship between the change in game-related type and the societal change.

d. Play in itself as a way of organizing action

In this way, it is possible to encircle what can be described as isles of interplay or, in other words, autonomously working systems. We achieve a double approach that has the ability to show us that something – play and gaming, even if it was in a modified form – had the capability to endure despite societal changes. Thoughts like these may open for problem-oriented studies of what this seemingly deep-going, societal transformation in Mohenjo-daro actually could imply for the single individual. At this point, we moreover notice that focus is transferred from a distinguishing of ways of organizing play-related actions to the defining of play *in itself* as a way of organizing actions. What has been of concern is accordingly how this small world as a unity turns out in relation to other things. Interior and exterior concordance in this context refers to relations in the form of double descriptions, relations that can be presented as *repetitive unities* that, through their doubleness, set the focus on the space in-between. The in-between thus forms a conditioning frame, a foundation on which we in the next stage of work can attempt to discuss the presence of moods of play.

→ Frame of play completed

6.4.4. Conceptualisation
Starting from Signifying principles →

This stage of work concerns a conceptualization with the goal to find moods of play within the frameworks that were worked out above. We know from the game-related traces that moods of play must have existed. But can we go so far as to pinpoint the presence – and impact – of such?

a. Possibilities for moods of play

We recall that there according to the model by Fritz (2004) exist four fundamental criteria for a mood of play to occur: (1) *self determination* that can be summarized as the experience of personal freedom; (2)

contrast, which has the contrast one experiences towards everyday routines in view; (3) *venture* and *experiment*, which is about the tension one experiences in being unaware of the outcome; (4) *imagination, creativity,* and *richness in ideas*, which is about the connection to specific qualities that concern the human being's capabilities to adjust to changeable surroundings.[204] Would it be possible to apprehend these criteria from a more literal perspective as well? Or, said in different words, can they be thought of as mirrored in the materials? To attain what Csikszentmihalyi and Bennett (1971) term play experience, it is of importance to separate the game from the routines of everyday life by marking out its place and providing it with a specific atmosphere. This can be done through specific architecture, or be achieved through the utilization of particularly designed objects (such as in the form of accessories). By defining game-related things, starting and stopping time as well as by applying rules, a limited spatio-temporal unit can furthermore be reached (Csikszentmihalyi & Bennett 1971:46ff). The criteria for experiencing moods of play become with this visible in circumstances that are more material. In this connection, we may refer to the above mentioned distance and the suggestion of this as a way of separating the game. It is also close at hand to return to the proposed 'ordering structures'. In such ordering, it is possible to distinguish features that can separate the playing from the everyday, in turn clearing the way for the emergence of moods of play. One such example may be seen in the material that was used. Casting sticks are generally made of ivory, a material which generally is scarcely utilized in Mohenjo-daro (Mackay 1931g:562). The cones for their part are unusually hard baked and deviate in that way from other objects in terracotta. We find an architectural aspect in the location of the two game-related types away from streets and in connection to streets, respectively. Concerning the links that can be seen to other, non-game-related finds, the question may be asked whether more objects are liable to belong to the game-related activities, either in the form of game-related utensils or as accessories. As to limitations, both casting sticks and cones can be said to display such as they are decorated with more or less schematized, and thus

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[204] For more on this, see the beginning of this chapter.

limited, variations of ornamentation. Starting from the emphasis by Csikszentmihalyi and Bennett that a generally limited time for play is a condition for moods of play to develop, we can moreover stress that what we see in the materials – in the previously defined, repetitive unities or worlds – is the presence of short time, or moments. With the focusing by Simmel on sociation, these moments form into ongoing beginnings. We acquire in this way an onward direction that provides us with a here-and-now that is based on the future.

For a somewhat different approach, we may return to the double descriptions by Bateson and the emphasis of these on the relational. Out of this perspective that what singles out must with necessity appear between the game and the everyday routines. At this point, we may make use of the request by Bateson to expand and reduce in order to avoid the characterizing adjectives. We can expand the above examples by rather than considering the individual aspects of the game-related types, lift forward the *concordance* that occurs among them. We can reduce the examples by looking at the different find contexts. Here, we can observe that since the game-related items are made of the same material as other objects found close to them, they can be seen as *contributors* to that or those materials that occasionally were 'in vogue'. This may not single them out, but it may make them more worthy, whereby they in any way could be used to single out the game. We reach an onward going movement in this context as well; but this time inside the system, through the correcting movement between the actual and desired state. The presence of short time thus appears in the form of a momentary character of the independently working systems.

With these lines of thought, the noteworthy, horizontal and vertical occurrences of the game-related objects could accordingly be seen as signs for a both widepread and long-lived presence of *moods of play*. This in turn helps us to avoid more functional explanation models concerning 'why' the game-related objects exist. If we embark on such, we know from experience that we would lose sight of play as play. In Bateson's view, we would be unaware of which logical type we were handling. Following his perspective, we see that play is built on self-validation. That is to say, it is enough in itself, since, if that would not be the case, it would cease to exist. Therefore, it must always be successful (Bateson 2002/1979:126). The horizontally spread

out, as well as the vertically long-lived presence of game-related objects thus appears as evidence of the existence of (successful) moods of play. What, then, is indeed occurring inside that framework which we have built up? What happens 'inside' the ordered game-related materials and what effects does it have?

b. Configurations and impacts of moods of play

<u>Play as an operating system:</u> According to Bateson, in play, we cannot talk about any development of behaviours, since nothing new needs to be included in the play. The partakers, A and B, keep to their characters. What occurs to his view is the formation of a pattern of co-operation that at least for a short period of time has a durability, and within which a development occurs of *fitting together*. With a minimum of changes, the system becomes more integrated and simplified. 'A plus B' forms a larger entity, through which a change in boundaries occurs. In this entity, new information only derives from the inside – here, we can compare with the simple actions, and how these respond to incoming reinforcements. This shows the point in using double descriptions as well as the division between simple and composite actions. Play turns into an independently working *operating system* (irrespective of which individual actions it is built up from). Thus play in itself – as an own world – emerge in an oscillation with reality or as a context linked to reality. Since, according to Bateson, adaptation is the reward of the successful change, and since play, which can only be successful, appears as evidence for such successful change, play can be described as an exploration of relations; a fulfilment of what Bateson terms the double requirement (Bateson 2002/1979:129f). With this, play becomes experimentation, or a 'lubricating oil' that turns reality movable and flexible. In this connection, we may note the comparison by Fritz of play as a power, directed towards such things as changeability and breaking up, or as an expression for that which is alive (Fritz 2004:259f). We should accordingly, in the game-related materials – as evidence for successful change and for that what is alive – distinguish what we could term paradigm-shifts in momentary guise. Instead of interpreting the relative differences in numbers of game-related types between DK-C

and HR as reflecting social differences (which we did in the previous level), we could hence in these rather discern such things as 'smoothness'; an avoidance of confrontations. We could even proceed further than that and *not only* interpret the changeable but remaining traces of play and gaming (exemplified with cones and gamesmen) as signs for a less dramatic societal upheaval (that is, an upheaval that not necessarily must have affected the single individual in a marked way). Rather, we could discern in these parts of the underlying *causes* to the societal upheaval having a less dramatic appearance.

<u>Play as the creation of separate, momentary worlds:</u> With a focus on forms of sociation in their incipient stage, the question comes up how we can be able to keep to this smallness, or rather, how we can turn the essence of this into conceptual language. Said in other words, the question concerns wherein the conditions for human society lie. How is this possible, and how does it distinguish itself from nature? Here, Simmel points at the existence of a certain kind of 'inside knowledge', a form of a priori which we cannot dismiss. In nature, on the other hand, we only see a co-existence without any knowledge of it (Simmel 1992/1908b:44, 53ff). This inside knowledge concerns the ways of forming social liaisons. By making ourselves conscious about this consciousness in the individual, we reach at the capacities of the individual. Different kinds of forms, or ways of forming oneself, are with this view given a more deep-going significance. This consciousness can be suggested to be of a different kind than the earlier discussed consciousness (which oscillated with play). It emerges as more permanent and therefore demonstrates that social liaisons *never can be totally closed*. This is the case since they always involve interpretation and since they – while constituting reciprocal actions – not only consist of individuals influencing each other. Rather, they come into being through a (self)consciousness concerning the social unity. Allowing this approach, we open up for the existence of this kind of a priori knowledge, at the same time as we abandon the kind of outside knowledge that only produces closed systems (Simmel

1992/1908b:43ff, 50ff).[205] With this continuously present consciousness, we arrive at something that could be designated as *simultaneously working consciousnesses*. In consequence, we avoid having to choose between the totally conscious or the totally unconscious way of approach. In light of this reasoning, we may however at the same time have a look at the specific structure of play. Following Csikszentmihalyi and Bennett, we recall how the I, when flow is experienced, melts together with play and disappears in play. Play is according to them active without a functioning self as a negotiator, something that would be impossible in reality (Csikszentmihalyi & Bennett 1971:56). At the same time, play presupposes a *conscious unconsciousness* for its existence: we 'know' that it is not serious and we voluntarily step into it. The oscillation between play and reality can with this perspective not be seen as linear but as *simultaneous*. We distinguish a "/.../voluntarily structured reality/…/" that coexists with "/…/negotiable reality/…/" (Csikszentmihalyi & Bennett 1971:56). We can hence suggest that besides those social liaisons that never close totally, there exists a creation of separate, momentary worlds that here become the same as that what escapes, or, more shortly, that what *is not closing*.

<u>Play as evidence for the autonomously working system:</u> Play can furthermore be seen as evidence for the existence of the autonomously working system; that which manages self control, that which has aim and meaning, that which can store energy, join other systems for ever and ever, that which "/.../is influenced by 'maps,' never by territory/…/" (Bateson 2002/1979:118), and therefore appears as an alternative to the closed systems. Play emphasizes the independent character of this system by not functioning as public property but being conditioned, formed by unspoken messages. It concerns a change in boundaries, on the basis of itself and without outer supply, which directs the question inwards: what happens *inside*? Without the need to provide information from outside, the play/system becomes a friendly ode to a You, an abolition of the I – A plus B jointly adjust to a

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[205] Therefore, we cannot expect to find totally regulated patterns. Rather, the order may rest on a certain kind of disorder – perhaps can we distinguish this in the fact that we are handling features in the materials that are to some extent 'fuzzy'?

successful double sight. And since language is not a language for time and space, since the mind is not containing entities but only ideas (which is to say, news of difference) (Bateson 2002/1979:123) – play *precedes* false evidence that something only 'is' and nothing more.[206]

→ Mood of play completed

– search session completed –

What has made this level so successful? Let us have a look at some of the stated points:

- *Events*: we allowed two different points of view concerning the subject of being left behind to strengthen each other in a horizontal- as well as a vertical direction. With this approach, focus turned from 'ways of being left behind' to a search for repetitive patterns in a more abstract sense. These patterns could therefore, instead of being viewed as remains of something, be approached as platforms for courses of events. *Reflection*: rather than remains, the materials come to signify material prerequisites for possibilities. We are provided with space for moments of a prevailing character directed towards the future, which at the same time appear as clearly demarcated unities in a horizontal- as well as a vertical direction.
- *The method of form*: with the use of the method of form, we could continue the search for abstract patterns through the process of fixating and putting together a number of properties via the tool 'distance' and, in this way, isolate regularities. We could in this manner reach at more all-embracing constructions of play. *Reflection*: with the method of form, we accentuate the unities mentioned above as forms for sociation or reciprocal actions in the shape of forms of play.

[206] In Derridaean words, this could also be formulated in the way that since play denotes the absence of a centre, it disintegrates 'presence' (Derrida 1993/1978:289ff).

- *Logical typing*: based on the idea of different logical types, we could proceed with our search for abstract patterns by distinguishing between simple and composite actions. With help of the distinguishing of 'reinforcements', we could in this way obtain more all-embracing constructions of play. *Reflection*: through the separation between logical types, the unities that were mentioned above appear as parts of contexts in the shape of ways of organizing play actions.
- *Ordering principle*: by use of the method of form, we could, through a differentiation of degree of consciousness, reach tenable frameworks for play- and game actions in the form of micro relations, within which different kinds of content could be allowed. This could in turn open up for a reaching and a discussion of the presence of moods of play. *Reflection*: based on forms for sociation, we lift forward the play- and game-related worlds as being in constant creation. As these are directed by an ordering structure – a confidence in the human being – this creating can include both social rules and regulations as well as moods of play according to the principle of 'oscillation of play'. Instead of focusing on forms of play, the search emerges as being about play in itself as form. This implies that the exterior and interior concordance has a validity inside the form: play appears as a world of its own that stands out in the shape of repetitive unities. With this, we can reach and discuss moods of play as an autonomously working and influencing power in the social life of human beings.
- *Isles of interplay*: with the distinctions between logical types, we could attain tenable frameworks for play- and game-related actions within which both social rules and regulations as well as moods of play could be included. Based on double descriptions, these frameworks were not based on something internal, but on two-parted relations. This could in turn open up for a reaching and a discussion of the presence of moods of play. *Reflection*: the play- and game-related worlds emerge as self-correcting systems or

> contexts in which the principle of 'oscillation of play' is seen as an internal, onward going key for communication. This is in turn based on the fact that the systems are seen as the products of double descriptions: focus is laid on the relational, termed isles of interplay. Instead of focusing on ways of organizing play actions, the search comes forward as being about play in itself as a way of organizing actions. With this, we observe that the exterior and interior concordance always must concern a double description, within play as a world as well as in the relation between this world and others; the relation turns into our 'repetitive unities'. With this, we can reach and discuss moods of play as an autonomously working and influencing system in the social life of human beings.

We have not only reached at the presence of moods of play, but also their possible configurations and their impacts on the social and societal structure. Coming this far, we observe that we are bursting the frames for the last compartment in our working grid. We realize that moods of play should be appearing as a significant component in human social life in general, within many more elements than explicitly play- and game-related contexts. With the terminology of Lönnqvist (1992:366ff), we are hence touching upon the invisible play; the one that exists, but not from the outside palpable.

7
Gaming in Mohenjo-daro – an Archaeology of Unities
– conclusions –

She does not want to give back to the past its poetry.
She wants to give back to it its lost body.
-Kundera, *The Book of Laughter and Forgetting* (1999/1978:119)

7.1. Conclusions on play

What can we conclude from the hitherto undertaken investigations and discussions in the name of play? A suitable way of reaching such conclusions may be to present summaries of the play- and game-related discussions and results of Chapter five and Chapter six, and thereafter consider what this has resulted in for Mohenjo-daro in general and for the area of DK-C in specific.

Conclusion of Chapter five

In Chapter five, *Game-related materials and archaeology: a deconstruction of documentation and publications of Mohenjo-daro*, we analyzed the empirical materials. In the level called *Basement*, we managed to pick out seven game-related types for the area of DK-C in Mohenjo-daro, which together constituted eight percent of the totality of registrations. Among these, casting sticks were the most numerous type. A distinct unevenness in the spatial distribution could be seen, with some areas being notably more clustered with game-related materials than other areas. Such variability could also be seen concerning the different, game-related types. The main part of the casting sticks were for example found in areas where other game-related types were generally not found, while the cones were mostly confined to one, single area.

In *Level one*, focus was directed on different game-related *types*. Here, it could be noted that the different areas where game-

related materials were found had different spatial characters concerning these materials, ranging from accumulations of finds to an even distribution. Concentrating on a selection of three game-related types, it turned out that cones displayed a connection to streets, while casting sticks and gamesmen were generally found away from streets. On the whole, three different, spatial characters could be seen for these types, among which casting sticks for example was of a character termed as markedly clustered and separated. Different spatial characters could also be distinguished from a vertical perspective. Cones showed a tendency towards deeper depth intervals, while gamesmen exhibited a tendency towards a shallower depth interval.

In *Level two*, the analysis started from a different perspective while asking for game-related *places*. This gave somewhat different results at hand. Different game-related localities were in general dominated by a particular, game-related type. They were furthermore not always keeping within one and the same block. A possible, yet not a particularly clear connection could be seen between game-related finds and large/outstanding structures. The game-related concentrations could also be seen to point to different contexts of non-game-related finds. Concentrations of cones coincided with a number of registrations referring to finds in terracotta, while concentrations of casting sticks in general coincided with registrations of finds in different materials other than terracotta and, to some extent, pottery. It was furthermore possible to distinguish sub-groups among the game-related materials by which more homogenous game-related concentrations appeared. In this context, a spatial connection between cones and balls in terracotta could be suggested. Based on these and other features, the spatial concentrations could be partly re-grouped, so that for example 'bl 5-7-8' in the area 'Middle A' could be divided into one northern and one southern part. When seen from a vertical perspective, specific features could be noted to appear together. Game-related concentrations belonging to the deeper depth intervals (2-3 metres and 1-2 metres) could for example be linked according to key words such as 'away from streets'; 'homogenous collection of game-related types'; 'large area'. Game-related localities of the shallower depth intervals (1-2 metres and 0-1 metres) could be connected following key words like 'streets/close to wells'; mixed

collection of game-related types'; 'small area'.

Level three consisted of a grounding of some of the results by a comparison with game-related materials from two other neighbourhoods in Mohenjo-daro; the HR and the DK-G areas. As to relative numbers, for example, it turned out that game-related registrations constituted eight percent in the HR area as well. Here, on the other hand, cones appeared as the relatively largest group of game-related types. An uneven spatial distribution of game-related finds could be noted for both the HR and the DK-G areas. Spatial variability between different, game-related types could be noted as well. In HR, casting sticks were similarly common at locations where other game-related types were not found. Cones were however not confined to one, single area, but appeared in different parts of the HR area. A very marked connection of cones to streets could furthermore be noted in the HR area. The same, spatial characters noted for the three selected, game-related types in DK-C could be seen in the HR area as well. The clustered and secluded character of the casting sticks, for example, could thus be strengthened. As to game-related concentrations, they seemed sometimes to 'spill over' borders of blocks in the HR area as well. The link to large/outstanding structures that was suggested in DK-C could not, however, be noted in either the HR or the DK-G areas. In contrast, such structures seemed to contain remarkably few game-related materials. A spatial closeness between cones and balls could be noted for the HR area as well. Considering vertical aspects in the DK-G area, quantitative and qualitative differences could be seen for the game-related types casting sticks, cones and gamesmen. It was for example noted that cones could be seen in larger numbers in the earlier strata, while gamesmen appeared in larger numbers in the later strata.

Conclusion of Chapter six

In Chapter six, *Play Matters: thoughts on the terms of play,* we discussed parts of the results of Chapter five. In *level one*, play was searched for *in the things*. We adopted a totality-oriented point of view on play and gaming through the use of the concept of central interests of Caillois. This applied to deeply rooted areas of interest within the human

being. However, this had the consequence that outer, socially based circumstances concerning play had to be left out. It also gave the play and gaming a mechanical-deterministic air. On account of the viewpoint of play as an idle pastime, the possible, game-related activities became stamped as more or less useless and insignificant. In this level, we also took on the concept of symbolic capital by Bourdieu. With this, the game-related finds were suggested as past, valuable possessions in a traditional, economic sense. However, this simultaneously led to the exclusion of the 'spirit' of play. It also made play and gaming go in line with the rational actor point of view. The two, object-centred approaches thus only managed to bring the second compartment of our working grid, that of Construction of play, to an end.

In *level two*, play was searched for *beyond the things*. We applied an angle of approach where the objects were viewed upon as traces of fields of bodily movements, instead of remains of psychological enjoyment. With this perspective, we left the interior of the individual. Pinpointing the significance of the context through ideas by Hall, as well as through the term 'feel for the game' as expressed by Bourdieu, we managed to connect the play and gaming to outer, socially based contexts. Play and gaming could thereby be sanctioned as adequate parts of the societal structure. With this level, we thus managed to proceed to the compartment frame of play. However, while concentrating on bodily movements, we still kept a focus on the individual. The sanctioning of play in an exterior context was moreover made possible by turning play into something serious; a 'game for social positions'. By this, the sanctioning turned up as conditioned by the encroachment of the surrounding, societal world. We reached an 'official' angle of play, where we could only look at it from outside. Play and gaming became but a struggle between individuals. For this reason, the level did not manage to proceed to the compartment mood of play.

In *level three*, play was searched for *through* and *with the things*. We adopted a perspective that focused on the objects as possibilities for specific, play-related powers of attraction, whereby we managed to include more partakers, and different kinds of partakers. By use of Simmel's method of form, we could, by proposing different powers of attraction to be reflected in the

materials, accentuate a construction of play in the shape of a game-related form, which means that we could discern a form of sociation, built up by reciprocal actions. By distinguishing between different logical types in line with the reasoning of Bateson, we could, by emphasizing the presence of certain powers of attraction, underline a construction of play in the shape of a way of organizing play actions. That is, a construction that does not respond to reinforcements from the outside. By concentrating on forms, frameworks of play emerged as ongoing creations directed by an ordering structure that could include social rules and regulations, as well as moods of play. By focusing on logical type levels, frameworks of play appeared as momentary, self-correcting systems, internally oscillating between social rules and regulations and moods of play. Reaching this far, through the viewpoint on form, play in itself could come forward as form. Through the perspective of logical typing, play in itself was emphasized as way of organizing actions. This implied that, in the first case, exterior and interior concordance had validity inside the form. Play appeared as an own world, coming forward in the shape of repetitive unities. In the second case, exterior and interior concordance emerged as concerning a double description, a relation, either within the world of play or between this world and others. The repetitive unities became the same as this relation. Hence, with these approaches, play and gaming emerged as autonomously working unities. We reached an 'un-official' angle of play in that we were able to step inside it. Following from this ability, we did not only manage to point at the existence of moods of play, but we could also discern possible impacts of such moods.

Play and gaming in Mohenjo-daro

In answer to the question of the last level in Chapter five, 'how is the gaming expressed' in DK-C/Mohenjo-daro, we listed six different, summarizing points. The gaming was described as *frequent*, when seen from the point of view of the relative share of game-related finds in DK-C- and HR areas. It was further described as rather *evenly spread out* when seen from an inter-point of view (that is, when different neighbourhoods were considered together). It was at the same time

presented as noticeably *unevenly spread out* when seen from an intra-point of view (that is, when individual neighbourhoods were considered). The character of the games was described as consisting of kinds of games that mainly left *casting sticks, cones* and *balls*. At the same time, the character was described as generally *not* consisting of kinds of games that left *game boards of non-perishable materials*. Lastly, the gaming was presented as having a *border-crossing* character, which means that it in several cases did not keep within the borders of blocks/houses. Through careful examination, it has hence become possible to gain an insight into the numbers and characters of the game-related remains, as well as the locations of the finds. In consequence of this, generally accepted assumptions become revised, concerning for example the idea of an even spatial distribution of these kinds of finds. In contrast, noticeable, repetitive differences can be lifted forward both between different, game-related types, as well as between horizontally and vertically distinguished areas. These areas range from totally empty to densely clustered locations. With these results at hand, we can thus from a relatively short distance distinguish specific movement patterns of individuals. The game-related materials may in this way appear as clues to such things as space utilization. When game-related concentrations sometimes 'spill over' borders of houses or blocks, it may question the function or even the validity of these borders. The fact that game-related concentrations located further away from the streets were found at greater depth, but those found close to streets/wells were in the upper levels, may express changeable settlement patterns. Here, we may recall the circumstance that some houses in the Post-urban/Late Harappan period seemed to have opened directly into the streets.[207]

In Chapter six, *level one*, the internal consistencies shown by the game-related types were in line with the idea of central interests seen to represent deep-going inclinations in the human being, manifested in repetitive, material details. The internal similarities were a consequence of the significance of these central interests; the game-related objects would only be valued in regard to their use in games. The internal divergences displayed by the game-related

[207] See Chapter 2.

materials were however also emphasized, as was the fact that they in a number of cases were carefully made. These were seen as signs of the objects acting as parts of status strategies in the form of valuable possessions. In this context, internal similarities between the objects, as well as ordered variations, became interpreted as signaling different spaces for free (but regulated) shaping, whereby the objects were suggested to act as messengers.

In *level two*, different games or groups of games were suggested for the game-related objects cones and casting sticks, for instance the game of skittles and domino-/stick-resembling games. These were interpreted in terms of fields of bodily movements, whereby focus was laid on which movements were required of the player. Following the deep-going character of these fields, the vertical changes seen in for example the decline of cones, were suggested as being of great significance. Such changes were proposed to mirror the societal changes that occurred during the Post-urban/Late Harappan period, during which a number of classical features disappeared. The more clearly distinguishable, horizontal differences were suggested as reflecting social (vertical) differences and the maintaining of social belonging. This was exemplified with the differences seen in the relative appearance of casting sticks and cones in the DK-C and HR areas. The differences were thus taken to mirror social differences of some kind, such as the belonging to different social groups. The clustered and secluded character of the casting sticks were proposed to possibly signal that different individuals perhaps had different access to the game. The links that could be seen to different find contexts, such as the circumstance that cones could be found with a number of finds in terracotta, were furthermore brought out. These links were interpreted as reflecting something of the uniformity or 'sameness' that has traditionally been emphasized for the Bronze Age Indus Valley in general and for Mohenjo-daro in specific.

In *level three*, cones and casting sticks, as representing the game of skittles and domino-/stick-resembling games, stood for a number of different powers of attraction that could attract different individuals into one and the same game. Focus thus changed from the single player to an infinite number of partakers, ranging from players to spectators. Following the ordering principle of the forms of sociation, the regulated pattern shown by the casting sticks was

suggested to be seen as a functioning order in itself. Therefore, it was proposed useful for questions concerning for example movement patterns. From the point of view of double descriptions, the vertical differences seen in the decline of cones and the simultaneous, successive appearance of gamesmen were said to express a change, which occurred in relation to the societal change during the Post-urban/Late Harappan period. With this view, the change in the game-related objects showed at something that within its changeability could endure, during and throughout what perhaps constituted societal upheavals. Points of view such as these were suggested useful for questions concerning what this seemingly deep-going, societal transformation could actually imply for single individuals. Proceeding to the possibilities for moods of play, repetitive and characteristic features of the game-related objects were seen as ways of separating the game from the everyday life. As to the links that could be seen to different find contexts, the game-related finds appeared as contributors to that or those materials that occasionally were 'in vogue'. The differences noted in the relative appearance of casting sticks and cones in the DK-C- and HR areas were seen in line with the existence of societal smoothness; the avoidance of confrontations. Likewise, the changeable but remaining traces of play and gaming during the Post-urban/Late Harappan period were not only seen as signs of, but as parts of the underlying causes to a less dramatic societal upheaval.

So far, significant differences can be noted between level two and level three in Chapter six. As we have seen, in level two, horizontal differences between the game-related types are interpreted in line with social differences. We reach an 'official' angle of approach that concerns social positions, where play and gaming falls in line with, and further strengthens, the principle of 'sameness' of the prevailing societal structure. In level three, horizontal differences between the game-related types are interpreted by use of terms such as smoothness. We get an 'un-official' perspective that accentuates the things that are close at hand and the capability of play – as evidence for successful adjustment – of momentary, 'silent' paradigmatic shifts. Play comes forward not as subjugated to and dictated by reality, but as autonomously working worlds. In light of the reasoning in level three, we can now see that if play would lack significance, we would

only be able to discern it as simple actions, to use the terminology of Bateson. From this point of view, we can thus see that what is discussed in level two is a kind of play that lacks play. Here, our aim was to fit in the game-related finds with other aspects in their surroundings, which is to say that the necessity of having the principle of exterior and interior concordance before our eyes was explicitly stressed.[208] However, it was soon discovered that what we thought of as concordance, was actually describing a direction from the outside and inwards (by tying play and gaming to for instance social differences). That is, we attained a concordance based on the conditions and encroachment of the exterior. At this point, the question may be raised whether the world of play, if instead viewed upon as an independent context, would really be in need of – or even could – obtain what we call an exterior and interior concordance with the surrounding world. If we on the other hand, and as was the case in level three, accept the presence of separate, parallel working and equivalent worlds, we can see that the exterior and interior concordance is about something totally different and much more complex, something that with necessity is occurring *within* the independently working worlds. What we here, thus, are being presented with is a possibility to escape ingrained patterns of thought, such as ideas concerning social differentiation. In this respect, level three presents a fundamentally different way of thinking than level two.

7.2. Conclusions of methodology

How can we conclude the discussion on the methodology outlined in this work? Here, we may in a similar way pursue, as well as reflect upon, the way(s) of working in Chapters four, five and six.

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[208] Such concordance could, actually, be said to mirror the world of play and gaming, within which every player bases his or her strategy on the strategies of the other partakers.

Conclusion of Chapter four

In Chapter four, we aimed at an archaeological way of working within which find materials could be approached as adequate and complete unities in themselves. A problematizing of the relation of archaeology towards its past was put to the fore through some considerations of historical source critical nature. Different viewpoints of this past were discussed through angles of approach rooted in archaeological source critical aspects. The paradox made up of the unspoken source-critical dimension of the archaeological discipline led to the highlighting of the existence and influence of the past(s) in the present. It was shown how traditional ways of approach ultimately led to a closed past, characterized by a 'to be', and seemingly clearly marked off from the present. Questioning why such an approach had come to be established led to the description of the mechanical way of understanding versus the vital mode of understanding using the reasoning of Simmel. This ended up in the conclusion that the mechanical angle of approach was tightly linked to issues of power and authority. Following the thinking in line with a partaking I in the process of working, the study turned to the working process of grounded theory. The theory was suggested useful for an archaeological approach on the condition that three modifications were made. The first modification concerned the demand of the theory to ground the research in empirical data. Through an emphasis on abduction using the terminology of Bateson, the data was defined as 'matter and the most intimate and immediate context of this', by which the research became grounded not in 'naked' objects but in objects *and* different (theoretical) aspects. The second modification was about a more detailed insight into the participation of the I in the working process. This was based in the further reasoning by Simmel as to the vital way of understanding. It led to the suggestion that different archaeological problems of an ontological character could be seen as starting points instead, which provided a foundation in specifically archaeological circumstances. The third modification was a consequence of the first one. It described a method outlined in the form of a grid, in which different levels and stages of work appeared as rather freestanding parts. On the basis of the adjustments, grounded theory was suggested as a viable way towards handling

fragmented archaeological remains as adequate and complete unities in themselves.

The ontological and epistemological nature of the issues discussed in this chapter demonstrates the successive building up of an alternative method. It outlines underlying causes as well as far-reaching effects of established ways of thinking. In particular, it pin-points the idea that a way of working, in order to function properly, must be grounded in deep-reaching ways of thinking.

Conclusion of Chapter five

In the bottommost level of Chapter five, called *Basement*, game-related entries were selected from the field register of DK-C and grouped into types with the help of the published excavation reports. On the basis of these types, a study of the spatial distribution was undertaken that could point at repetitive patterns. These were studied in order to figure out whether they were to be seen as the result of excavational circumstances. By not appearing solely as such, the repetitive patterns came forth as something of a more complex nature. Main categories in the shape of *similarities* and *differences* were chosen. This level provided the analysis with a necessary 'basement', upon which further investigations could be built.

In *level one*, the game-related types were studied in relation to patterns of being left behind. That is, the types were studied as to degree of *density/dispersal*. Abstract concepts such as *firm/loose*, or *forming part of* and *separated*, emerged and could be used as tools in the sorting and comparison. With concepts such as these, it was possible to avoid directing the investigation on a search for static and fixed definitions, while instead lifting forward the presence of repetitive patterns. In this way, the study concluded in displaying the existence of *repetitive tendencies*, *formal variations* and *exceptions*. A significantly small number of finds thereby appeared as 'deprived of context'.

In *level two*, the game-related types were studied in relation to the existence of game-related places. In more tangible words, this means that composite concentrations of game-related types were being studied. Again, abstract concepts such as *bringing together/dividing up*, or *contextual concentrations* and *connected contexts*,

could come forward and be utilized as tools, by which the search could be directed on repetitive patterns. The investigation alternated between a study of details and a study of connected features, whereby the emphasis came to be laid on *connections*. The study resulted in pointing at *repetitive tendencies*, *formal variations* and *exceptions* of different compositions than in the previous level. Following from this, a significantly small number of objects turned up as being 'without any connections'.

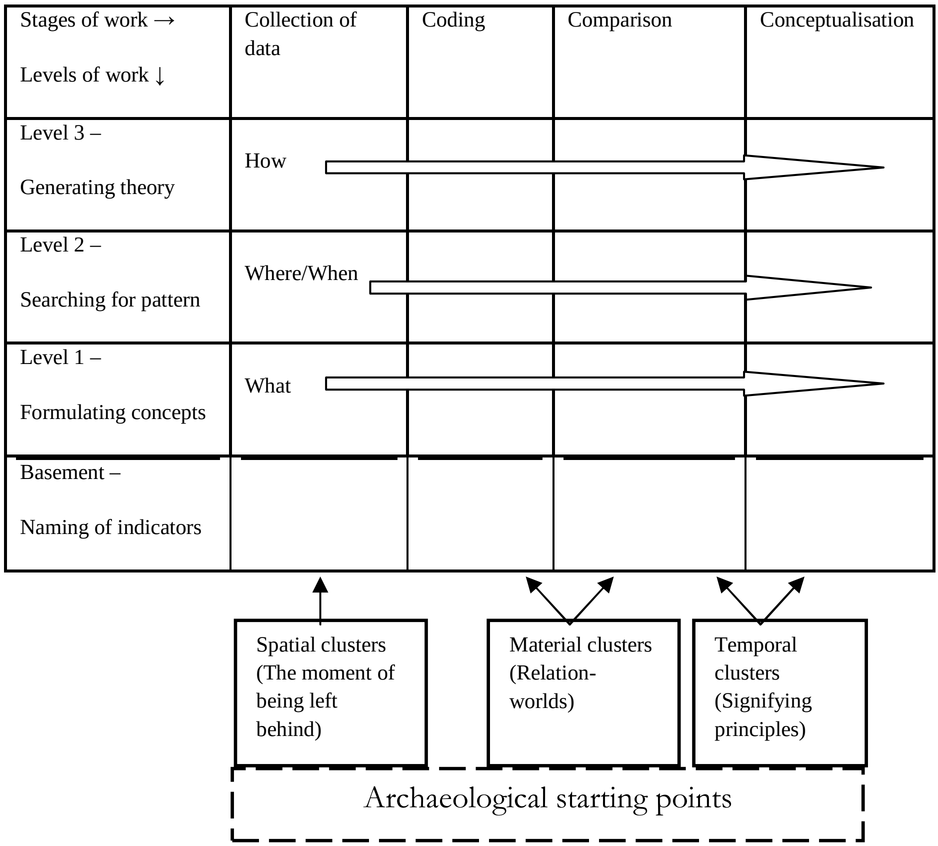
In the uppermost level, *level three*, following the question 'how is the gaming expressed', selected results of the previous levels were compared with game-related materials from two areas outside the DK-C area; the HR and the DK-G areas. This was done in order to see whether the results could be further strengthened. Through the comparisons, formal features of a larger, inter-connected kind could be reached, whereby any search for fixed definitions could once again be avoided. In answering 'how' the 'where' and 'when' of the game-related places were, *repetitive tendencies*, *formal variations* and *exceptions* could once again be selected. Lastly, six points could be presented as to 'how' the gaming was expressed. With this level, the study had reached a theoretical saturation. The level can therefore be described as a step back, or a halt, in order to summarize the results of the previous levels and tie the study together.

Abstract patterns and different ways of testing

In this chapter, I have aimed at illustrating *from a more practical point of view* the mode of working – illuminated in the working grid – that was developed in the previous chapter. The working grid has been applied in order to come close to and treat that air of uncertainty that surrounds this material because of the situation of the sources. On the basis of this, it has been possible to avoid the classical question as to what the finds *are*. Instead, attempts have been made to pass by the problematic search for fixed definitions which can be said to follow from the question 'what is'. Here, a search for repetitive forms or categories has been adopted. The archaeological starting points have in this chapter been termed spatial-, material- and temporal clusters. These terms make on the one hand the more corporeal way of

working in this chapter clear. On the other hand, however, and in line with the search for forms, they do not refer to literal clusters but rather to more formal, repetitive clusters. Rather than pointing at real time designations, here Temporal means for example a search for degrees of continuity. Concepts such as firm/loose have moreover in line with this not concerned the search for facts, if something *is* spread out or lost, but have rather been used as formal concepts. With this direction, it has been possible to meet the materials on a more abstract level. The search has in this way more and more come to concern *abstract patterns*. The way of working has followed in line with the aims of grounded theory to reach an increasing degree of abstraction, and to test the empirical materials. The different ways or levels have been guided by different, main questions. These have in turn been formulated out of the interrogatives 'what', 'where/when', and 'how' (fig. 7.1.). In line with the avoidance of the question 'what is', the issue has not concerned: what are game-related objects/what are not game-related objects. The modes of analysis have constituted attempts to approach the materials in ways that go beyond this certainly essential, but in this context difficult question. Although the ways of testing partly build upon each other, they have not followed a linear working model. The aim has not been to search for opposites and sift away things. Rather, my intention has been to test different directions, which, despite or with their factors of uncertainty and limitations, can be attended to as *autonomously working unities*. Having such unities in view, one may furthermore suggest that one actually reaches beyond the question of the 'certain' versus the 'uncertain'. Instead, the task has concerned re-contextualizations; a building with the materials aimed at reaching connected unities.

Fig. 7.1. The working grid for Chapter 5, each level equipped with corresponding key words.



Critical reading

With the above direction, we can moreover understand the reading of our written sources – the field register for DK-C, and the writings of Mackay and of Marshall in the published excavation reports – in a different way. The critical reading has in this connection not concerned whether the authors are right or not. Rather, a point of view has been adopted in which the texts come forward as adequate contexts in themselves. If we see something as either right or wrong, for example the idea of Marshall that certain small cones may have functioned as amulets, we take this out of its 'by Marshall created' context. We could see the artefacts lined up in a catalogue-like way as already taken out and deprived of their context. We could however

also choose to see that both Marshall and Mackay sort the finds from partly different viewpoints. With Mackay, there is plenty of room for the presence of play and gaming, and, so, small cones are therefore interpreted as gamesmen. The same objects turn into ritual amulets with the more ideologically directed perspective of Marshall. It is therefore questionable how profitable it would be to discuss who is right and who is wrong. This can be compared with a number of people describing one and the same room for someone who cannot see it. Such descriptions would most certainly differ from each other while emphasizing different objects or different atmospheres, whereby the room would appear in different lights for the listener. The analysis of Chapter five has started in the detailed contexts above all provided by Mackay, but also by Marshall as well as by the author of the field register. Through this meeting, new contexts can be said to have been brought about. The critical reading has not been about rejecting something as wrong or raise something as right but to *engage with*, with the aim of creating.

Conclusion of Chapter six

Level one has constituted a way of working that has been based on diverse examples from the previous chapter. The level can be summarized as a traditional, object-centred approach. The following key words characterize this level: it has been guided by the question of *what*; it has been focused on the *to have*; it has concerned the tracing of *artefacts*; it has been directed on the *things*; it has been situated *inside the object/the individual*; it has been *without anchoring in a social/exterior context*; it has been handling something that *constantly was*; it has been *without time*; it has been situated *at a great distance from the past*.

Level two has been grounded in two types of objects and a thorough survey of the properties of these. The level has shown the necessity of the researcher to aim at a concordance with other archaeological aspects. Based on social conditions, however, the level has turned out to be based on an encroachment of the exterior. The level can be said to represent a more traditional way of working within archaeology. At the same time as the research is supposed to be directed on the human being, the tone tends to proceed to a

Darwinian linguistic usage with an underlying, serious way of thinking in line with a struggle for existence. The following key words characterize this level: it has been guided by the questions of *where* and *when*; it has been focused on the *to be*; it has concerned the tracing of *actions*; it has been directed on the *relation between things and individuals*; it has reached the *outside of the individual and thereby the interaction between the individual and the outside world*; it has strived at an *anchoring in a social/exterior context*; it has been handling something that *is ongoing and resting on the past*; it has contained *ongoing time and past time*; it has been situated *close to the past*. Comparing this level with the next, third level, we distinguish a number of further key words. In this level, the relation has been handled as a *connection*. The way of working has concerned a *broadening of approach by focusing on details*. We have been talking about the existence of what can be termed as *consciousnesses in-between*. We have been focusing on *repetitive patterns* of both a more deep-going, as well as of a more superficial, shifting character. Since the repetitiveness has been interpreted in line with the principle of 'sameness', however, all interpretations can, with the language of level three, be said to describe simple actions (they respond to reinforcements). We can furthermore say that we have problematized the term *distance*, a distance that has concerned the problematizing of our own distance to the past. With the language of Hall, we have been accentuating an ongoing process of encoding and decoding between ourselves as researchers and the things that we have been studying. However, since the focus has been directed on the incorporated versus the objectified, or on individuals of the past and 'things', we have observed that there has been no corresponding process of encoding and decoding in the things that we have been studying. Starting from a more discursive way of looking at systems of representation, as well as from the modified view that points at the researcher and the things that are being studied as an own, small world in itself, we have noticed that no such world can appear. Instead, we as researchers, as well as the individual of the past, have been captured in our respective surroundings or discourses. This may hence, again, be expressed in terms of the encroachment of the exterior, preventing the small world from arising.

Level three has a narrowed focus, grounded in examples from

the same two types of objects that were studied in the previous level. Rather than seen as remains, the materials have been handled as possibilities of something. The aim of the level has been to emphasize, through and with the materials, autonomously working, forward-directed unities. The level can be said to represent an archaeologically non-traditional way of working that is based on an underlying positive tone. The following key words characterize this level: it has been guided by the question of *how*; it has been focused on the *to partake*; it has concerned the tracing of *forms of play as well as the form of play in itself/ways of organizing actions of play as well as ways of organizing the action of play in itself*; it has been directed on the *making it possible to see individuals and the relations of individuals through things*; it has reached *an area that cannot either be described as outside or inside, but rather as an autonomously working world*; it has strived at an *anchoring through the principle of autonomously working*; it has been handling something that *is ongoing with a promise of a future*; it has contained *ongoing time and future time*; it has been situated *with the past*. If comparing this level with the previous, second level, we distinguish a number of further key words. In this level, the relation has been handled with as a *whole in itself*. The way of working has concerned a *condensation by searching for larger contexts*. We have been talking about the existence of what can be termed as *simultaneous consciousnesses* and *double consciousnesses*. We have been focusing on *repetitive patterns* by among other things separating composite actions, or ways of organizing actions, from simple actions, the latter being of less value for the researcher since it, to use the words of Bateson, is stuck with the individual. We can furthermore say that we have problematized the term *distance*. The distance has concerned the course of events – that what occurs – in the past that is now seen as a space for possibilities. The partaking role of the researcher has at the same time formed a prerequisite for this to come true. Starting from the above mentioned, more discursive way of looking at systems of representation as well as from the modified view that points at the researcher and the things that are being studied as an own, small world in itself, we observe that such a world can appear. Through their reciprocal encounters, individuals in the past produce unities of ongoing creation, at the same time as we as researchers likewise produce unities of ongoing creation in our reciprocal encounter with

the past. That is, a *we* is being created, a small world that never can become finished but exists as an ongoing creation. Exterior and interior concordance has thus appeared in a different way in this level; as something that has concerned the small world in itself as an autonomously working unity.

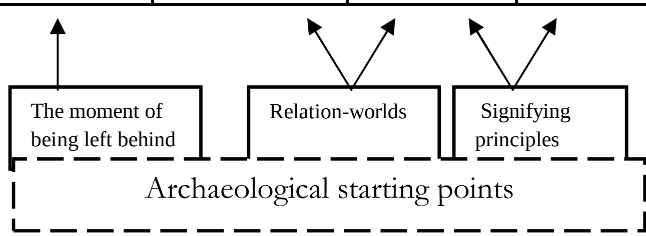
Abstract patterns and different ways of testing

In this chapter, a *theoretical* application has been pursued in the mode of working – expressed in the working grid – that was developed in Chapter four and used from a more practical point of view in the previous chapter. As shown by the description of the levels, this has been attempted in order to illuminate and test different theoretical angles of approach. As was the case in the previous chapter, we have avoided asking what a specific object *is* or what it once *was*. Instead, we have put the materials into different contexts or perspectives. The way of working can be described as an increasingly distinct oscillation between what is *concrete* and what is *abstract*. The method can be summarized as searching for the abstract in the seemingly concrete, through an abstraction of details with as much of a concrete character as possible. As in the previous chapter, it has consisted of ways of testing, which likewise have been guided by main questions composed of the interrogatives 'what', 'where/when', and 'how' (fig. 7.2.). The different levels have developed out of the critique raised in the preceding level, but the model is nevertheless not to be seen as linear. Here, again, different directions are aimed at that can be seen as autonomously working unities. With this building with the materials, we can clearly see that the way of working, grounded in the three archaeological starting points, and the aim of illuminating different play spectra, rather than appearing as opposing poles overlap each other. Looking into the rear-view mirror, we observe that the ideas making up the archaeological starting points to large parts agree with the theoretical thinking of play that is successively outlined. At the same time as we in level three have made use of the method of form following Simmel, for example, the overall mode of

working builds on this method.[209] Perhaps most clearly seen in the third level, the striving to illuminate the presence and impact of play can thus be said to join the suggested, methodological way of working.

Fig. 7.2. The working grid for Chapter 6, each level equipped with a selection of corresponding key words.

Play spectra → Stages of work → Levels of work ↓	Starting unities Collection of data	Construction of play Coding	Frame of play Comparison	Mood of play Conceptualisation
Level 3 – Generating theory	How To partake Ongoing and future time			
Level 2 – Searching for pattern	Where/When To be Ongoing and past time			
Level 1 – Formulating concepts	What To have Without time			

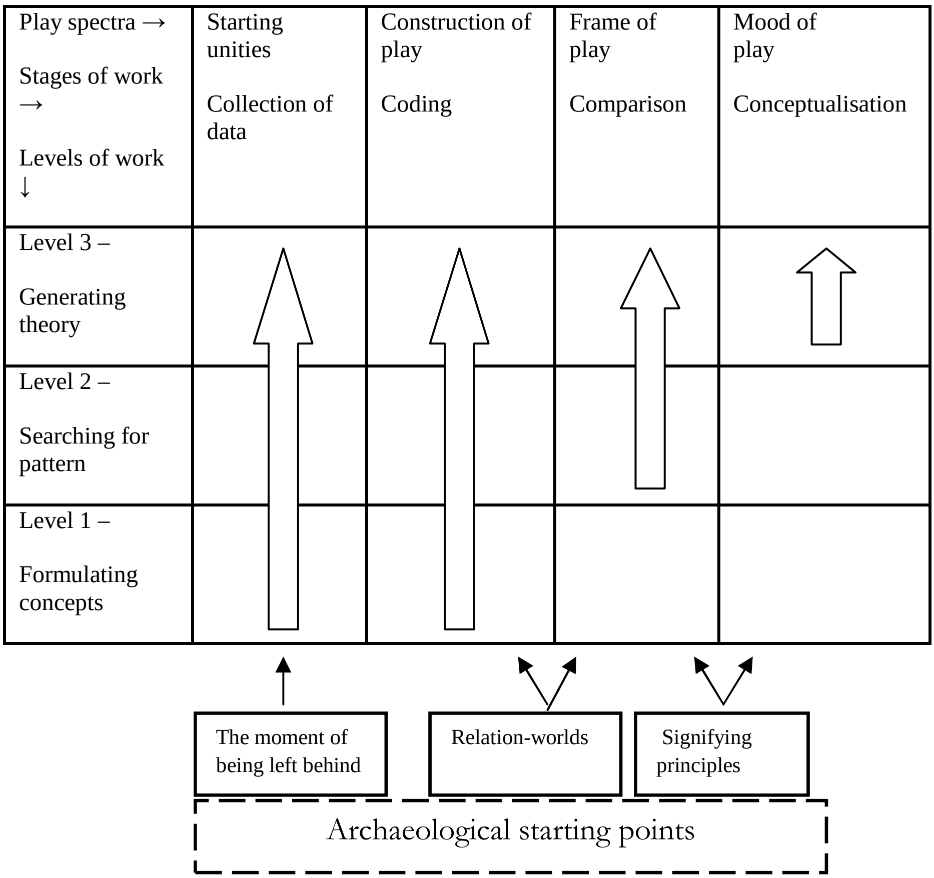


[209] As can be seen in the descriptions of the archaeological starting points relation-worlds and signifying principles in Chapter 4.

Vertical reading

As mentioned, the working grid offers a lucid way of working in which interruptions and successive transitions can be studied in detail. However, in Chapter six, the elasticity of the grid can become even more pronounced. This is the case since, in this chapter, the grid could likewise be read *in a vertical direction* (fig. 7.3.). That is, it could be read from the bottom straight up to the top, beginning in the first column to the left. When seen from this direction, the grid consists of four steps according to the model of grounded theory that has been used in this work. The first step or column takes place between the archaeological starting point 'the moment of being left behind' and the play spectrum 'starting unities'. Based on different kinds of collected materials, different perspectives of being left behind are successively being studied. Through coded concepts such as abandonment mobility, and comparisons of such, the study successively moves to an increasingly abstract level. In this step or column, the establishment of platforms takes place. In the next step, more and more abstract constructions of play can be formed through a more strategic selecting of materials and creation of concepts. The third column, which only consists of two compartments, concerns the encircling of frames of play by connecting previously defined concepts. The fourth step, which consists of only one, single compartment, constitutes the defining of a core – in this case, in the form of an abstracted viewpoint of play in line with the aim of the chapter. With the possibility of reading in different directions, horizontally and vertically, we get a model of work made up of separated parts, which at the same time can be linked both empirically and literally.

Fig. 7.3. The working grid for Chapter 6, displaying a vertical reading direction.



8
The Method of Play
– summary and visions –

All the acts of the drama of world history were performed before a chorus of the laughing people.
-Bakhtin, *Rabelais and His World* (1984/1968:474).

In Chapter one, *Faceless People Playing?*, we ended up viewing the game-related finds of Mohenjo-daro as traces of a markedly interwoven play and gaming. This resulted in the question of how one could illuminate and handle that irrational element called play from an archaeological perspective. It also opened up for the question whether it was possible to find an alternative approach, in which fragmented archaeological remains rather than parts of an all-embracing Something could appear as adequate and complete unities in themselves. The formulated questions pointed towards an aim for an alternative way of working. In Chapter two, *Picturing the Bronze Age Indus Valley: a short review of old and new research perspectives*, the history of research and the geographical context for the settlement of Mohenjo-daro and its surroundings were described. The description started in Mohenjo-daro and proceeded successively outwards. It was completed with a few comments concerning our need as researchers to create pictures and familiarize what we are studying. In Chapter three, *A lens on games: research on game boards, game utensils and (board) games*, we focused on an alternative, geographical and research historical context for the settlement in question. Here, we presented research on ancient games in the area. The chapter started in the outer circle where the previous chapter ended and moved successively back inwards. In Chapter four, *Grounding Archaeology, Avoiding Absoluteness: the development of method*, a theoretically grounded method for the work was developed. This was based on critical reflections of generally scientific, as well as specifically archaeological, viewpoints and ways of working. The method was formed in line with grounded theory that had been modified to suit the archaeological perspective better. The modifications started from an

extra emphasis on abduction and on the things near at hand. They also included the drawing up of three archaeological starting points. They came to describe views based on the search for autonomously working unities. A method for the following chapters could on these grounds be sketched in the form of a grid that presented four separate rows (levels of work), each consisting of four separate compartments (stages of work). This provided different ways of working, as well as the ability to more easily consider the chosen approaches critically. The chapter was based on the idea that a method, in order to effectively present alternative routes, must be well thought over and theoretically grounded. It can be said to meet the question concerning a possible way of handling fragmented archaeological remains as adequate unities in themselves. Methodologically, it also provides room for attempts of approaching the phenomenon of play and the material traces of this. In Chapter five, *Game-related materials and archaeology: a deconstruction of documentation and publications of Mohenjo-daro*, the method of the previous chapter – which resulted in a working grid – was applied in a practical way on game-related materials from the area of DK-C in Mohenjo-daro. The materials were analysed through a critical reading of older, published and un-published, excavational documents, belonging to the large-scale excavations of the site in the 1920s and 1930s. Of main concern was the question of how to study materials through what are generally seen as problematic and deficient sources. The analysis was undertaken in view of different questions following the four separated levels of the working grid. In this way, the sources/the game-related materials could be approached from different angles. The levels proceeded in a horizontal direction, beginning from the bottom left compartment. Through the character of the first level, called Basement, an attempt was made to ground the analysis in the specific circumstances of the sources at hand. The game-related materials were handled on an increasingly abstract level, whereby formalized concepts such as category and context came forward as more and more essential. The conclusion of the chapter was that the game-related finds could be studied despite the problematic appearance of this kind of material and the problems inherent in the sources, and that the finds possessed an archaeological information potential. In Chapter six, *Play Matters: thoughts on the terms of play*, the

method of Chapter four – expressed in the working grid – was used in a theoretical way on the game-related materials. Exemplifying with some of the results of the analysis of Chapter five, the aim was to illuminate the presence and societal impacts of the phenomenon of play. The chapter can be said to meet the question concerning how to reach the irrational element of play from an archaeological point of view. This was done by the use of both established and new terminology, starting from different questions following three separated levels of work (the grid was here reduced from four to three levels). The chapter came above all to be about testing the tenability of different theories as to their capability of illuminating different aspects of play. These aspects were included in the working grid in the form of four different play spectra placed on top of each of the four working stages. As in the previous chapter, the levels proceeded in a horizontal direction beginning from the bottom left compartment. Later, however, it was concluded that the grid could be read in a vertical direction as well, beginning with the left column and proceeding upwards. The chapter described a gradually more clearly seen oscillation between the concrete and the abstract. Of central importance in the discussion was the increasing presence of autonomously working unities, between the researcher and the material that was being studied as well as within the studied material. Based on this, the fourth and archaeologically speaking most difficult play spectrum, called the mood of play, could finally be reached. In Chapter seven, *Gaming in Mohenjo-daro – an Archaeology of Unities: conclusions*, the undertakings and discussions concerning play, as well as concerning the method that was used, were summarized and briefly reflected upon.

The main concern has been to avoid the question what an object 'is' or once 'was'. Instead, the items have been put into different contexts. Through this, the search has become directed on finding and defining abstract patterns. With the perspective on what lies near at hand and the search for abstract patterns, a consideration for different kinds of source critical aspects have been considered. In the reading of written sources in Chapter five, attention have been given to what we may call historical source criticism. In Chapter six, we have focused on a more archaeologically grounded source criticism. With this focus, we have been able to move from the consequences of formation

processes, to the discovery, by help of the materials, of beginnings. The way of working can be described as a twofold process of ongoing creation, in the past as well as between the researcher and the things that have been studied. Since this creation has occurred through and with, and not beyond the things, the things can be suggested to have become created as well, or 'made complete' with the words by Simmel. In this way, we have been able to lift forward autonomously working unities in the materials of study. We have started from the seemingly impossible task to reach the seriousness of play as play, that is, to reach something that has no point beyond itself, and to do this by use of scientific terminology – for which play stands forward as a challenging opposition. The aim of reaching play has with this offered a test of the scientific linguistic usage. It has provided us with the possibility to see the paths along which we went, by which we have been able to expose pitfalls in our scientific thinking. The four-step model of grounded theory that has been borrowed here, has from the point of view of this work been seen as too linear. The levels have in this work rather functioned as separate angles of approach, each seen as an adequate unity in itself. With this, an alternative approach to the established one, in which the materials become pressed together into one model, has been presented. From an analytical point of view the approach has involved, using the terminology of Simmel, a continuous taking apart and putting together. The flexibility of the non-linear mode of working can be illustrated by the detachable compartments of the working grid, as well as the possibility of reading the grid in different directions. Its parts can be lifted forward as both interconnected and independent. Rather than focusing on fixed definitions, this has opened for a playing with the materials with the aim of distinguishing patterns. The materials have been playfully handled in the form of loose building stones or gamesmen, which have been linked in different ways and moved around according to the rows and compartments of the grid – the game board. In this way, the working method and the aim of reaching play has become interwoven into a twofold structure, in which the distinguishing of unities has formed key undertakings for both the method of use and the study of the materials. The work can with this be said to strive for something of that dizzying wholeness that play represents – and which should be aimed at in order not to diminish play.

Chapter six ended in a widened view of play as something not only reserved for explicitly play- and game-related contexts, but as an intertwined and recurrent element in the social life of human beings. With this, play appears as a fundamental dimension, the significance of which for human life becomes essential to observe in studies of the past. Play emerges as the successful example of the obliteration of the I. It constitutes that what is not closing, as well as challenges the idea of the 'to be'. It turns into an instrument that helps to clear the way for more well thought out modes of thinking; a method that steers away from the single, all-embracing model. It becomes, also, an access to the individual of the past. It shows us that the difficulties in accepting the presence of the un-structured element in an ordered, societal structure, or the prevalence of the view of archaeological materials as parts of an all-embracing Something, among other things depend on a confusion from our archaeological side. While endeavouring to understand the lives of past people, we seem in reality recurrently ending up handling societal structures, which should be something totally different. The presence of the un-structured element, or the disordered order, should logically only be possible to comprehend if we proceed to the small format, the smallest reciprocal actions to use the words by Simmel. The insignificance that is traditionally attributed to the intimate and immediate sphere can in turn be suggested as following from its being close at hand, whereby it actually becomes inaccessible for established ways of thinking.[210] This can also be expressed in the way that so long as one is ignorant to or denies the (importance of the) small world, one takes on the role of the seemingly supremely acting subject in relation to what is being studied – despite the problematizing of the 'distance'. That is to say, a distance is established due to a denied distance, so that, in the end, what is being studied can only be studied from a distance or from the outside. In contrast, and following the

[210] The confusion can furthermore be seen in attempts to study the religion, or ideology for a particular societal complex in the past. 'Belief attributes' and 'belief' appear in this light as two, different things that perhaps too easily tend to be mixed up. To reach and handle belief would, as has been the case with play, demand a totally different kind of methodology. This is the case since belief, like play, describes something fundamental in and for the human being, at the same time as it demands a 'being inside'. The same thing could be stated for concepts such as 'life' or 'death'.

phenomenon of play, we have in this work indicated a way of coming close to this small format by opening up for the presence of autonomously working unities. This has been achieved through problematizing the idea of exterior and interior concordance, whereby this concordance has been suggested to be found *within* these unities. At this point, we can propose that when we are able to perceive this view methodologically, we will be capable of reaching the archaeological aspects (the non-written narratives). This also implies a change of focus as to where to look for paradigmatic shifts. We reach a *nanoarchaeology* that similar to the physics concentrates on the small format in order to seek answers to macro phenomena. In Mohenjo-daro, this means that we gain other, more socially embedded insights into a settlement that on the one hand comes forward as a superior key site, on the other hand still puzzles us as to a number of societal aspects. Concentrating on game-related materials, which seem to constitute a significant part of the number of finds found at the site, we catch a glimpse of the habits and movement patterns of individuals. As shown, this can open for questions relating to such things as degree of societal openness versus seclusion. It can also lead us past too simplified ideas as to social differentiation, and provide us with alternative thoughts concerning societal changes. Pointing at the potential of this old, already excavated material, the work has at the same time been impaired with difficulties as to exactness in spatial distribution and related issues. It therefore ends with a call for new excavations, presenting a methodology that is capable of brushing against aspects of human life rather than discussing elusive 'authorities'.

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